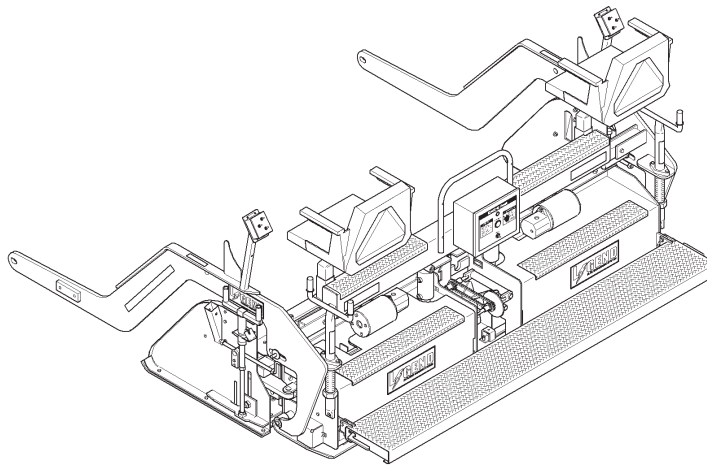
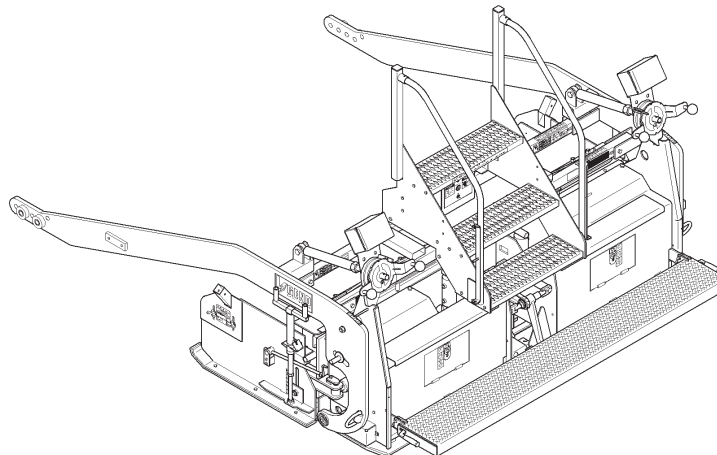




OPERATIONS AND SERVICE MANUAL



8515 LEGEND ELECTRIC SCREED



8816 LEGEND ELECTRIC SCREED

LEGEND ELECTRIC SCREED SYSTEM

Manual No. 986622

LIMITED WARRANTY POLICY AND PROCEDURES

WARRANTY

1. If a defect in material or workmanship is found and the authorized dealer is notified during the warranty period, LeeBoy will repair or replace any part or component of the unit or part that fails to conform to the warranty during the warranty period.
2. The warranty date will begin upon the completion of the warranty form by the initial customer and will expire after twelve (12) months have passed. The Warranty Card should be filled out within (10) days of delivery of the unit.
3. Engines are warranted by their manufacturers and may have warranty coverage that differs from that of LeeBoy.
4. Replacement parts furnished by LeeBoy are covered for the remainder of the warranty period applicable to the unit or component in which such parts are installed.
5. LeeBoy has the right to repair any component or part before replacing it with a new part.
6. All new replacement parts purchased by a LeeBoy dealer will carry a six (6) month warranty. Remanufactured parts purchased by a LeeBoy dealer will carry a ninety (90) day warranty.

ITEMS NOT COVERED

LeeBoy is not responsible for the following:

1. Charges for travel time, mileage, or overtime.
2. Charges related to transporting the product to and from the place at which warranty work is performed.
3. Airfreight charges related to transporting repair parts to the place at which warranty work is performed.
4. All used units or used parts of any kind.
5. Repairs due to normal wear and tear, or brought about by abuse or lack of maintenance of the equipment, except for premature failures, conveyor chains, polytrack pads, and track rails.
6. Attachments not manufactured or installed by LeeBoy.

7. Liability for incidental or consequential damages of any type including, but not limited to lost profits or expenses of acquiring replacement equipment.
8. Miscellaneous charges.

LIMITATIONS

LeeBoy has no obligation under this warranty for:

1. Any defects caused by misuse, misapplication, negligence, accident or failure to maintain or use in accordance with the most current operating instructions.
2. Unauthorized alterations.
3. Defects or failures caused by any replacement parts or attachments not manufactured by or approved by LeeBoy.
4. Failure to conduct normal maintenance and operating service, including without limitation, providing lubricants, coolant, fuel, tune-ups, inspections or adjustments.
5. Unreasonable delay, as established by LeeBoy, in making the applicable units or parts available upon notification of a service notice ordered by LeeBoy.
6. The warranty responsibility on all engines rests with the respective manufacturer.
7. LeeBoy may have support agreements with some engine manufacturers for warranty and parts support.

OTHER WARRANTIES

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED STATUTORY AND IMPLIED WARRANTIES APPLICABLE TO UNITS ENGINES, OR PARTS WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT OR WARRANTY, OR ALLEGED NEGLIGENCE OR LIABILITY WITHOUT FAULT, SHALL LEEBOY BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOSS OF PROFIT OR REVENUE, COST OF CAPITAL, COST OF SUBSTITUTED EQUIPMENT, FACILITIES OR SERVICES DOWNTIME COSTS, LABOR COSTS OR CLAIMS OF CUSTOMERS, PURCHASERS OR LESSEES FOR SUCH DAMAGES.



LEGEND ELECTRIC SCREED SYSTEM

USER'S REFERENCE GUIDE

DELIVERY DATE _____

UNIT SERIAL NUMBER _____

DEALER'S NAME AND ADDRESS

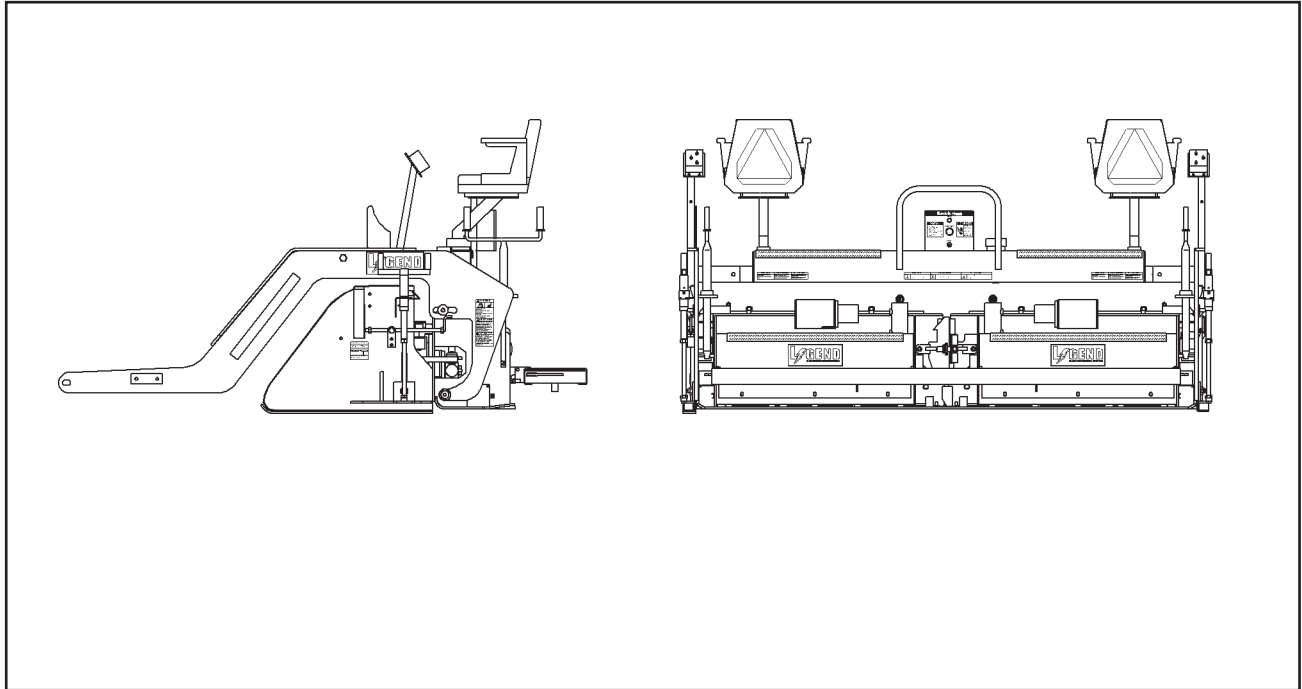
PHONE NUMBER _____

EQUIPMENT HOURS _____

SERVICE MANAGER _____

688 North Highway 16 • Denver, North Carolina 28037 • www.LeeBoy.com • (704) 966-3300

MODEL 000 NAME OPERATORS AND SERVICE MANUAL

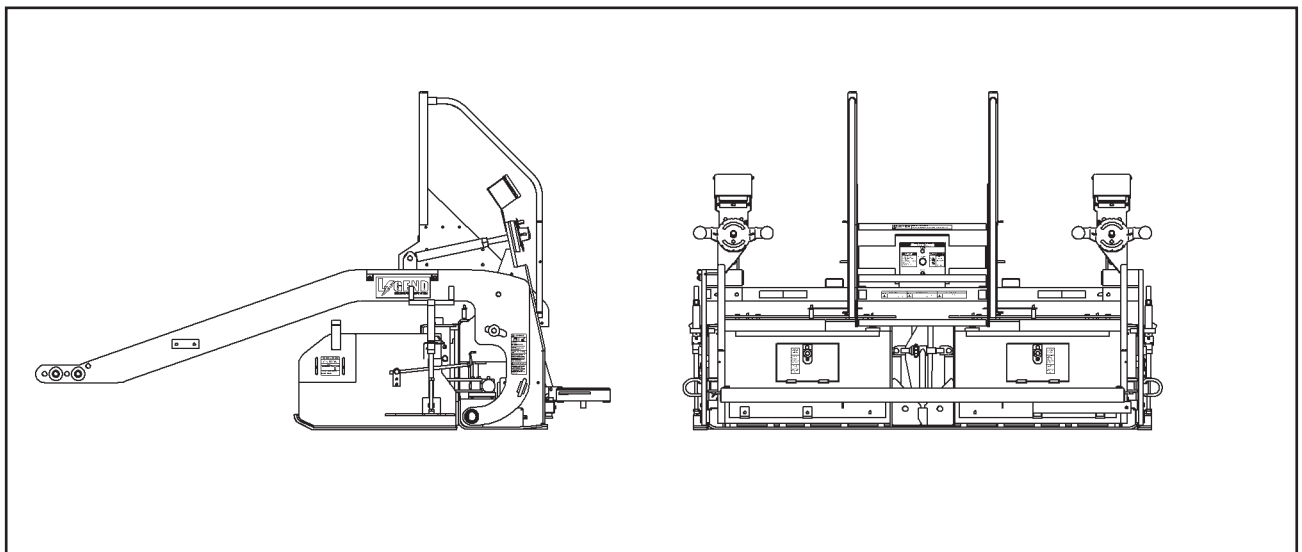


8515 SIDE AND REAR VIEW

This manual should be used with all related supplemental books, engine and transmission manuals, and parts books. Related Service Bulletins should be reviewed to provide information regarding some of the recent changes. If any questions arise concerning this

publication or others, contact your local LeeBoy Distributor for the latest available information.

Contents of this manual are based on information in effect at the time of publication and are subject to change without notice.



8816 SIDE AND REAE VIEW

IMPORTANT

SAFETY INSTRUCTIONS

This manual provides important information to familiarize you with safe operating and maintenance procedures. Even though you may be familiar with similar equipment, you **MUST** read and understand this manual before operating this unit.

Safety is everyone's business and is one of your primary concerns. Knowing the guidelines covered in the following paragraphs and in Section 1 will help

provide for your safety, for the safety of those around you, and for the motor grader's proper operation.

LOOK FOR THESE SYMBOLS WHICH POINT OUT ITEMS OF EXTREME IMPORTANCE TO YOU AND YOUR COWORKERS SAFETY. READ AND UNDERSTAND THOROUGHLY. HEED THE WARNINGS AND FOLLOW THE INSTRUCTIONS.

DANGER

YOU MUST FOLLOW ALL DANGER SAFETY NOTES. IF YOU DO NOT FOLLOW THE INSTRUCTIONS, YOUR MISTAKE MIGHT LIKELY RESULT IN VERY SERIOUS INJURY OR DEATH.

WARNING

WARNING safety notes must ALSO be followed. Your mistake might result in SERIOUS INJURY to yourself or others.

CAUTION

CAUTION safety notes are ALSO very important. They point out to you where your mistakes could cause PHYSICAL HARM to you or others, or damage to the machine.

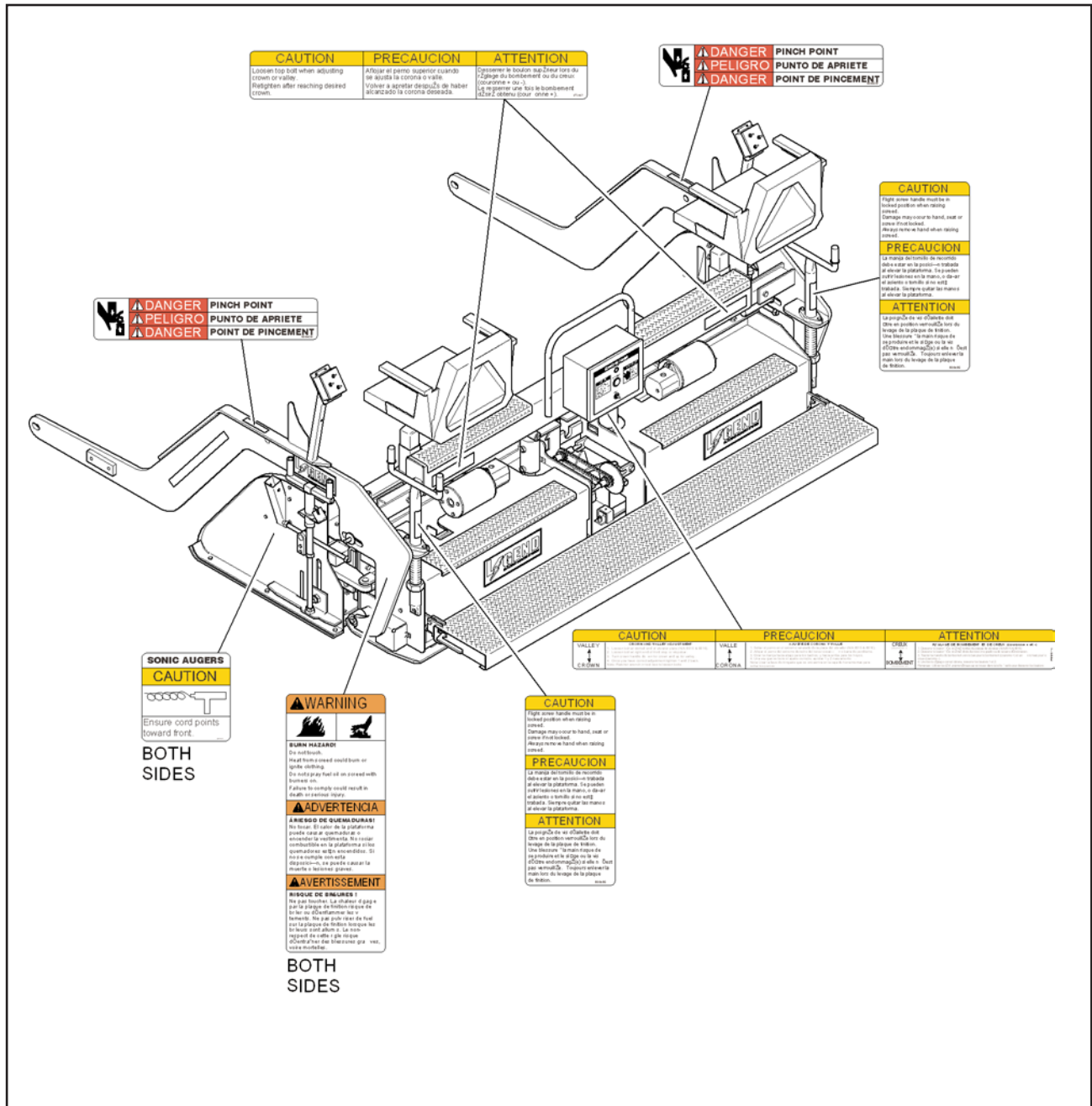
SAFETY PRECAUTIONS

If your screed has been repainted, it is extremely important that all the decals referring to CAUTION, WARNING, and DANGER be replaced in their proper locations. The illustrations on this page will aid you in determining the proper locations; however, for additional help, you should refer to the parts listing in the parts section of this manual and note the

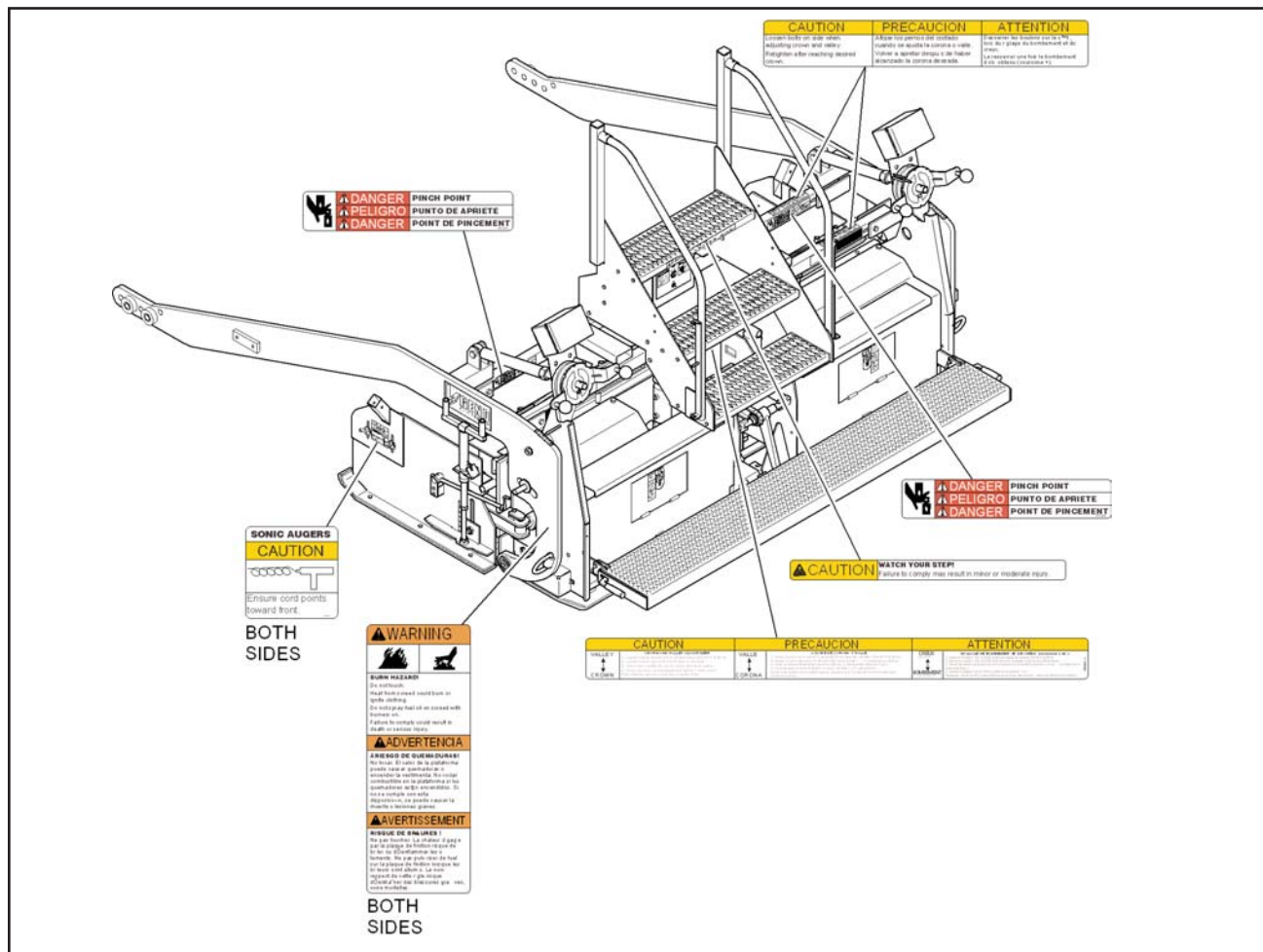
description column. Under this column, a description of location is provided for each decal. If you need more explicit instructions, contact your dealer.

NOTE

It is the responsibility of the owner and operator to make sure that all decals are readable and located on motor grader as designated by the manufacturer.



8515 DECALS and DECAL LOCATIONS



8816 SCREED DECALS and DECAL LOCATIONS

PRE-START INSPECTION

INSPECT machine. Have any malfunctioning, broken or missing parts corrected or replaced before using. Hydraulic hoses should be checked daily for wear and leaks. Replace if damaged. CHECK that all the instruction and safety labels are in place and readable. These are as important as any other equipment on the machine. READ and FOLLOW all instruction decals. WEAR OSHA required safety equipment when running the screed.

Operating Safety

Always make sure no person or object is in the line of travel before starting. Work slowly in tight areas. Never spray cleaning solvent on or near screed while it is being heated.

Avoid steep hills if possible.

Always look before changing the direction of travel.

Stopping Safety

Always park the paver on solid, level ground in low range. If this is not possible, always park the paver at a right angle to the slope. Lower screed when parked.

Use proper flags, barriers and warning devices, especially when parking in areas of traffic.

Maintenance Safety

Always replace damaged or lost decals.

Work slowly in tight areas.

Never spray cleaning solvent or release agent on or near screed while it is being heated.



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Section 1

INTRODUCTION



GENERAL INFORMATION

This manual contains Specification information, Controls and Operating Procedures, Maintenance and Repair Procedures for the Legend Electric Screed System.

SPECIFICATIONS

Refer to Section 2 - SPECIFICATIONS in this manual for all major system specifications and for typical torque value tables.

CONTROLS AND OPERATING INSTRUCTIONS

Refer to Section 3 - OPERATION.

The operator of this equipment should READ, UNDERSTAND, and FOLLOW the operating instructions, Cautions, and Warnings provided in the front of this manual and in the OPERATION section.

WARNING: Do not attempt to operate the Legend Electric Screed System unless fully trained in the machine operation, only authorized personnel should operate the Legend Electric Screed System. All instructions provided in this manual and on the machine decals must be followed to prevent damage to the equipment and/or injury to operating personnel.



MAINTENANCE PROCEDURES

Refer to Section 4 - MAINTENANCE in this manual for all maintenance and repair procedures.

CAUTION: All maintenance instructions provided in this manual should be followed to insure safety of the personnel performing the maintenance and to prevent damage to the machine.





Section 2 SPECIFICATIONS

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Section 2
SPECIFICATIONS



GENERAL INFORMATION

The specifications provided in this section are applicable to the Legend Electric Screed System. Included in this section are machine weights, dimensions, performance, and torque values for both metric and standard inch fasteners.

TABLE 2-1. DIMENSION SPECIFICATIONS [See Figure 2-1]

	8515 Legend Electric	8816 Legend Electric
Performance Specs.		
Basic	8' (2.44m)	8' (2.44m)
Maximum	15' (4.57m)	15'6" (4.72m)
Screed		
Screed Plate	3/8" (9.5mm) AR400 Steel	1/2" (12.7mm) AR400 Steel
Main Screed	15" (.38m)	20" (.51m)
Extensions	7" (17.8cm)	12" (30.5cm)
Heating System	Electric	Electric
Extensions Length	3'6" (1.07m)	3'9" (1.14m)
Walkway Width	12" (30.5cm) W/Extension	12" (30.5cm) W/Extension
Dimensions		
Weight	2,900 lbs. (1,315kg)	4,500 lbs. (2,041kg)
Overall Width (Transport)	8'6" (2.6m)	8'6" (2.6m)

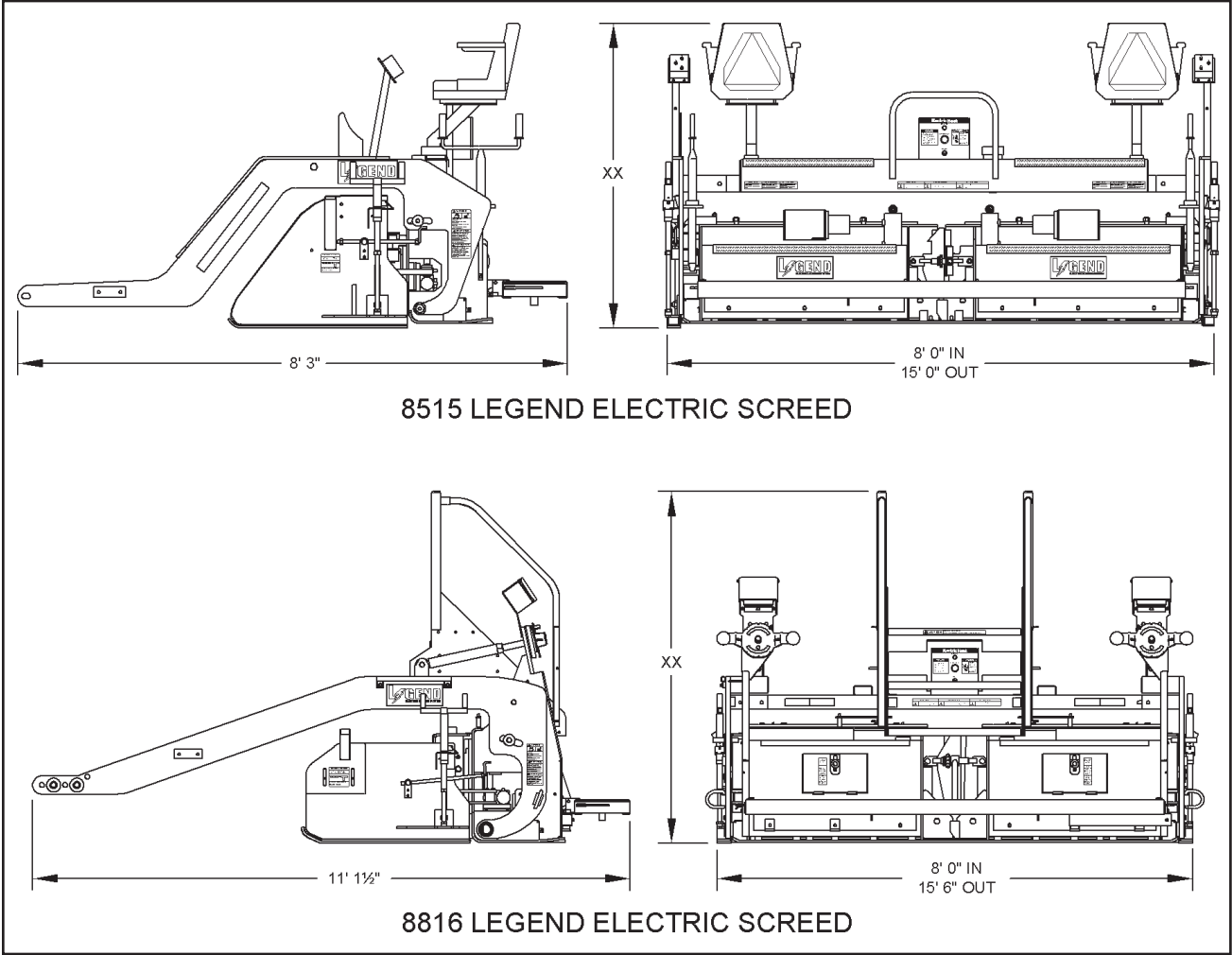


FIGURE 2-1. OUTLINE DIMENSIONAL DRAWING



TABLE 2-2. SCREED

ITEM	SPECIFICATION
Heat	Electric
Extensions	Two 45 inch hydraulically operated extensions
Vibration	Two hydraulic vibrators producing 3400 vibrations per minute
Crown/Invert	Adjustable, at least 2 inches of crown and 1-1/2 inches of valley Includes a level indicator

Section 2

SPECIFICATIONS



TABLE 2-3. TORQUE SPECIFICATIONS FOR STANDARD INCH FASTENERS

WARNING: The following Table lists torque values for standard hardware and are intended as a guide for average application involving typical stresses and machined surfaces. Values are based on physical limitations of clean, plated and lubricated hardware. In all cases, when an individual torque value is specified, it should be followed instead of values given in this table.



CAUTION: Replace original equipment with hardware of equal grade.



		CAPSCREWS: SAE GRADE 5				CAPSCREWS: SAE GRADE 8			
SIZE	THREAD	TORQUE FT. LBS.		TORQUE N•m		TORQUE FT. LBS.		TORQUE N•m	
		Dry	Lubed	Dry	Lubed	Dry	Lubed	Dry	Lubed
1/4	20 UNC	8	6	11	9	12	9	16	12
	28 UNF	10	7	13	10	14	10	19	14
5/16	18 UNC	17	13	24	18	25	18	33	25
	24 UNF	19	14	26	20	27	20	37	28
3/8	16 UNC	31	23	42	31	44	33	59	44
	24 UNF	35	26	47	36	49	37	67	50
7/16	14 UNC	49	37	67	50	70	52	95	71
	20 UNF	55	41	75	56	78	58	105	79
1/2	13 UNC	75	57	100	77	105	80	145	110
	20 UNF	85	64	115	86	120	90	165	120
9/16	12 UNC	110	82	145	110	155	115	210	155
	18 UNF	120	91	165	125	170	130	230	175
5/8	11 UNC	150	115	205	155	210	160	285	215
	18 UNF	170	130	230	175	240	180	325	245
3/4	10 UNC	265	200	360	270	375	280	510	380
	16 UNF	295	225	405	300	420	315	570	425
7/8	9 UNC	430	320	580	435	605	455	820	615
	14 UNF	475	355	640	480	670	500	905	680
1	8 UNC	645	485	875	655	910	680	1230	925
	14 NF	720	540	980	735	1020	765	1380	1040
1-1/8	7 UNC	795	595	1080	805	1290	965	1750	1310
	12 UNF	890	670	1210	905	1440	1080	1960	1470
1-1/4	7 UNC	1120	840	1520	1140	1820	1360	2460	1850
	12 UNF	1240	930	1680	1260	2010	1500	2730	2050
1-3/8	6 UNC	1470	1100	1990	1490	2380	1780	3230	2420
	12 UNF	1670	1250	2270	1700	2710	2040	3680	2760
1-1/2	6 UNC	1950	1460	2640	1980	3160	2370	4290	3210
	12 UNF	2190	1650	2970	2230	3560	2670	4820	3620

TABLE 2-4. TORQUE SPECIFICATIONS FOR METRIC FASTENERS

WARNING: The following Table lists torque values for standard hardware and are intended as a guide for average application involving typical stresses and machined surfaces. Values are based on physical limitations of clean, plated and lubricated hardware. In all cases, when an individual torque value is specified, it should be followed instead of values given in this table.



CAUTION: Replace original equipment with hardware of equal grade.



NOMINAL SIZE & PITCH	CLASS 8.8 [GRADE 5 EQUIVALENT]				CLASS 10.9 [GRADE 8 EQUIVALENT]			
	TORQUE FT. LBS.		TORQUE N•m		TORQUE FT. LBS.		TORQUE N•m	
	Dry	Lubed	Dry	Lubed	Dry	Lubed	Dry	Lubed
M4 x 0.7	2.27	1.70	3.07	2.30	2.27	2.31	4.17	3.13
M5 x 0.8	4.58	3.43	6.20	4.65	6.22	4.67	8.43	6.33
M6 x 1	7.75	5.83	10.5	7.90	10.60	7.97	14.3	10.8
M8 x 1.25	18.89	14.17	25.6	19.2	18.95	19.26	34.8	26.1
M10 x 1.25	39.11	29.52	53.0	40.1	53.87	40.59	73.0	55.0
M12 x 1.75	64.94	48.71	88.0	66.0	88.56	66.42	120.0	90.0
M14 x 2	103.32	77.49	140.0	105.0	140.22	107.01	190.0	145.0
M16 x 2	162.36	121.77	220.0	165.0	221.40	166.05	300.0	225.0
M20 x 2.5	317.34	236.16	430.0	320.0	428.04	321.03	580.0	435.0
M24 x 3	516.12	409.59	740.0	555.0	754.38	557.19	1010.0	755.0
M27 x 3	797.04	597.78	1080.0	810.0	1084.86	811.80	1470.0	1100.0
M30 x 3.5	1084.86	811.80	1470.0	1100.0	1476.00	1107.00	2000.0	1500.0



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Section 3

OPERATION



GENERAL INFORMATION

This section provides the Operating Instructions for the Legend Electric Screed System.

It is important to read, understand, and follow all "Precautions Operating Instructions and Warnings" written in this manual before starting or operating the machine.

DANGER: Failure to observe the "Operating Precautions and Warning Instructions" provided in this manual can cause serious injury or death. Only authorized personnel, who are fully trained in the machine operation, can operate the Legend Electric Screed System.



This machine should be kept in good mechanical condition at all times.

WARNING: Do not operate a machine needing repairs. Put an information tag on the instrument panel that says, "DO NOT OPERATE". Remove the key from the ignition switch. Repair all damage at once. Minor damage can result in major system failures.



OPERATING CONTROLS

Operating controls for the Legend Electric Screed System are shown in Figure 3-1 and listed in Table 3-1.

WARNING: Do not start or operate the Legend Electric Screed System before reading, understanding, and following all information given in this section and shown on the machine. The operators must read and understand the function of all controls, indicators, and gauges before starting the engine. Serious injury or death can result if these procedures are not followed.



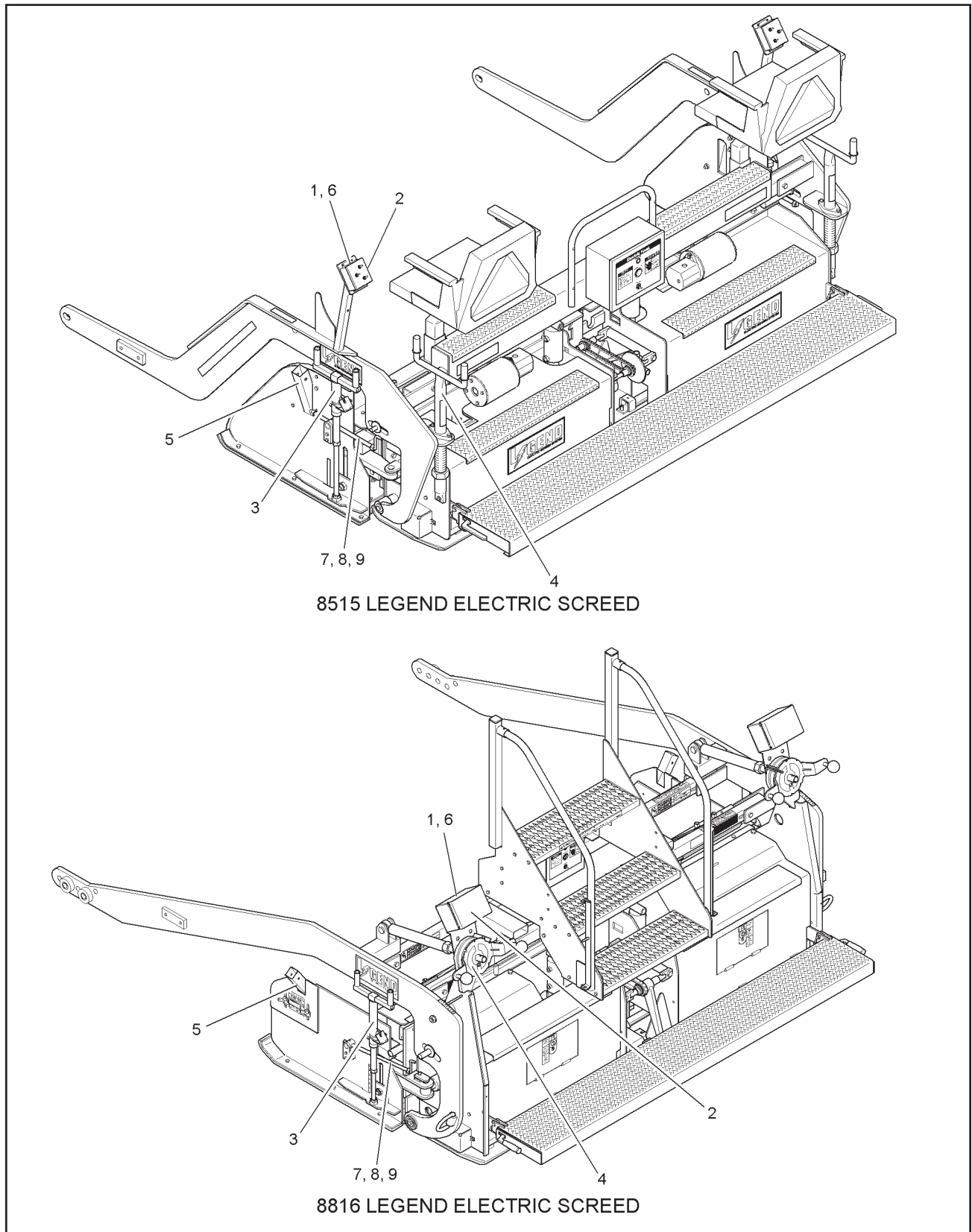


FIGURE 3-1. OPERATING CONTROLS

Section 3 OPERATION



TABLE 3-1. OPERATING CONTROLS

FIG. REF	ITEM NO.	CONTROL NAME	TYPE	FUNCTION
3-1	1	Sonic Auger Adjustment Left		Adjusts the height of material at Sonic Auger Sensor (Item 5) mounted on End Gate. Controls AUGER SPEED in manual.
3-1	2	Left Auger Box		Contains toggle switches for LEFT EXTENSION IN/OUT, SLOPE RAISE/LOWER, LEFT AUGER ON/OFF, and AUGER MATERIAL HEIGHT MIN/MAX, MANUAL AUGER SPEED. NOTE: Auger toggle should be left in ON position at all times. Auger and screed extensions can be operated by a person standing on Lower walkway. Right Auger box is identical and located on right side of the machine.
3-1	3	Depth Screw		This control sets the depth of the End Gate.
3-1	4	Flight Screw		This lever controls the depth of the asphalt.
3-1	5	Sonic Auger Sensor		Used for adjusting the height of material at End Gate. Connected to Sonic Auger Adjustment (Item 1). Keep End Clean.
3-1	6	Speed and Pile Height	Potentiometer	Adjust thickness of material in End Gate.
3-1	7	Tilt Screw		Used to adjust the tilt on End Gate.
3-1	8	Adjustment Screw		Adjusts the front of the extension to provide the best mat. Up or down and can level extension at wide widths.
3-1	9	Adjustment Screw		Adjusts the other end of the front of the extension. Tilt Rougher/Smother.

OPERATION

SAFETY

Operating Safety

ALWAYS make sure no person or object is in the line of travel before starting.

WORK slowly in tight areas.

NEVER spray cleaning solvent on or near screed while it is being heated.

AVOID steep hills if possible.

ALWAYS look before changing the direction of travel.

Stopping Safety

ALWAYS park the paver on solid, level ground in low range. If this is not possible, always park the paver at a right angle to the slope. Lower screed when parked.

USE proper flags, barriers and warning devices, especially when parking in areas of traffic.

Maintenance Safety

ALWAYS replace damaged or lost decals.

WORK slowly in tight areas.

NEVER spray cleaning solvent or release agent on or near screed while it is being heated.

PRE-START INSPECTION

Inspect machine. Have any malfunctioning, broken or missing parts corrected or replaced before using. Hydraulic hoses should be checked daily for wear and leaks. Replace if damaged.

Check that all the instruction and safety labels are in place and readable. These are as important as any other equipment on the machine.

Read and Follow all instruction decals.

Wear OSHA required safety equipment when running the screed.

OPERATING LEGEND ELECTRIC SCREED SYSTEM

The Legend electrically heated screed system is very easy to operate, and requires very little maintenance. The system consists of a hydraulically driven generator mounted in the paver, which feeds power to a distribution/control box mounted on the screed. The control box is where you will select the

heating function before you begin to pave (See Fig.

3-2). Once the heating function has been enabled, the distribution/control box will apply electrical power to the heating elements and the heating cycle will begin. The heating cycle is timed to optimize the heat generated at the screed plates. Once the timed cycle finishes, the heat will cycle off, and will not re-start unless the operator re-starts the cycle by pressing the "start heat" function on the control box.

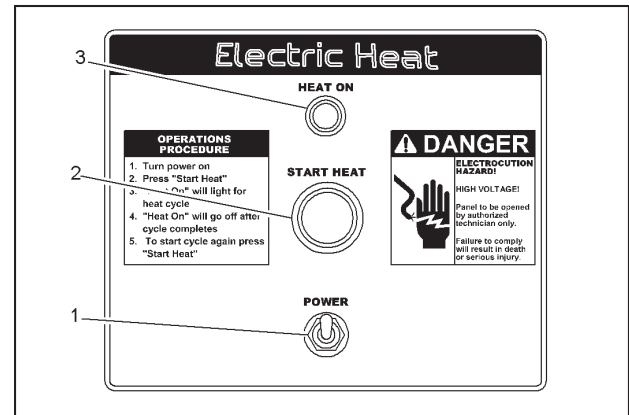


FIGURE 3-2

To operate the screed heating system, start the paver and bring the engine to normal operating temperature as outlined in the paver manual. Once the paver is at operating temperature, set the throttle on the paver to full engine RPM.

NOTE: Throttle positions less than full will still produce screed heat, but at a drastically reduced rate and temperature.

On the screed heat control box, turn the power switch (Figure 3-2, Item 1) to the "ON" position. Now press the "Start Heat" (2) button. The heating cycle will begin, and the "Heat On" (3) light will illuminate. The "Heat On" (3) light will stay on as long as the screed heat is operating. The factory time setting for the heating cycle is approximately 30 minutes. This should be sufficient in most circumstances to generate sufficient heat for the paving process to begin without screed heat problems. Once the heating cycle is complete, the "Heat On" (3) light will go out, and the elements will no longer heat the screed plates. The temperature that the screed plates reach will depend on the outside ambient temperature of the day, or morning that the heat is operated. If, after the heat cycle is run one time, and the screed plates still require a higher temperature, the operator only has to re-start the system by pressing the "Start Heat" (2) button again. The system will run for the set time once more.

Section 3 OPERATION



NOTE: If the heat system is running, and the operator presses the "Start Heat" (2) button during a heating cycle, the heat will continue to operate normally, and the timer circuit will be re-set to the beginning of it's set time cycle. This will not hurt the system, and may be useful on cooler days to make the screed heat system run longer than normal without stopping.

There are certain things that can be done to help the screed heating system operate most efficiently. When the screed heat is in operation, it is recommended that the screed not be set directly on the ground. It is also better if the screed is not fully raised, allowing more wind under the screed plate while heating. The best position for the screed plate is to be raised 1 to 2 inches off of the ground. This will provide the best results when heating. If the ambient temperatures outside where you are paving are relatively warm, you may not need to have the screed in this position to heat, but it will help when the winds are high, or the day is cool. Be certain that the paver RPM is at full throttle. You may find that the faster you operate the engine of the paver the better the heating system will operate.

Another way to decrease the heating time of the screed plates is to set the screed directly on a fresh mat of hot asphalt while running the heating system. This should drastically reduce the heating cycle times.

During normal usage, there are no other controls for operating the heat system. All the operator has to do is run the paver, turn the system on, and select heat.

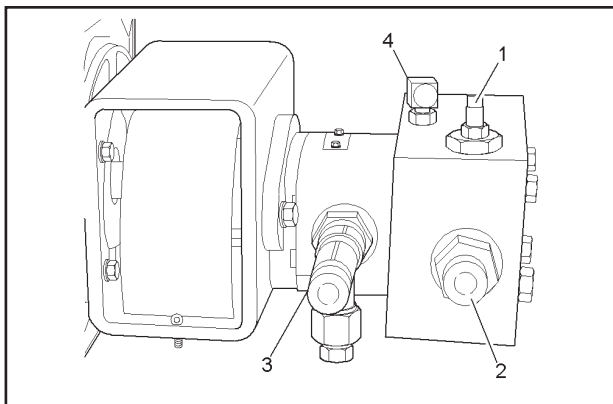


FIGURE 3-3

MAJOR COMPONENTS

GENERATOR

The Legend Electric Screed System consists of three major components. The generator, and heating controls, and the heating elements.

The generator is the first component. On your 8500 and 8515 paver, the generator is mounted under the hopper floor near the right hand track. The generator is hydraulically driven by the first section of the rear pump on the engine pump stack. All LeeBoy generators are equipped with an integrated generator speed control manifold. This manifold should not require adjustment, but if there is a need to fine tune the generator speed, there is an adjustment on the manifold. This adjustment will only effect the speed of the generator a small amount, and is for fine tuning only.

The picture shows an example of the generator motor with the integrated control manifold (See Fig. 3-3).

The fine tune speed adjustment (1) is on the top of the manifold. The two ports facing you in the picture are pressure (2) and the discharge port (3). The pressure line is on the right (2), into the manifold, and the discharge line (3) is on the left, coming out of the motor. The fitting (4) coming out of the top of the manifold is the motor case drain, and is tied directly to the lower hydraulic belly tank. The generator is provided oil for operation by a gear pump on the paver engine. The faster the engine is run, the faster the generator will run also. When testing the speed of your generator, make certain that the paver engine rpm is at full, and the hydraulic temperature is at normal operating levels. See Maintenance for generator speed tuning.

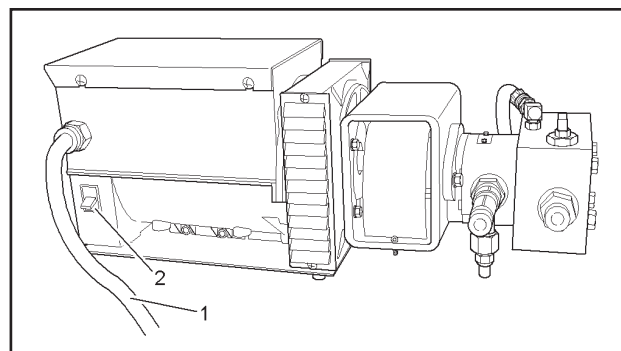


FIGURE 3-4

The entire generator is shown here (See Fig. 3-4). Note the electrical cord (1) coming out of the case of the generator at the far left. This is the cable that runs to the rear of your paver that supplies power to the screed. This cable should be inspected regularly to ensure that no damage has occurred to the cable during normal operation. Chafing, cuts, breaks, etc.

NOTE: If damage is seen in the power cable, the unit should not be operated until a new cable is installed.

BREAKER

Figure 3-4 also shows the location of the main output breaker (2) in your generator. All output power from the generator is lost when this breaker is in the "tripped" or "off" position.

NOTE: If, when your screed heat system is turned on, you have no heat on any screed, this breaker should be checked. If, after resetting the breaker, it will not stay in the "on" position, a screed wiring fault should be assumed. See Maintenance, Section 4.

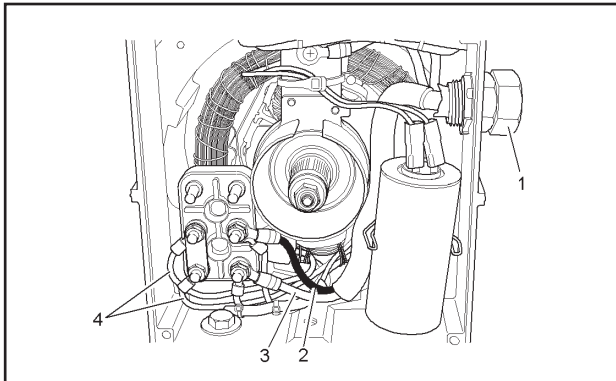


FIGURE 3-6

The rear of the generator is shown here (See Fig. 3-6). You can see the power cable (1) coming into the generator case at the top right. Just below the generator case is the voltage capacitor. The capacitor controls the output voltage of the generator, and may need to be changed if no voltage is generated by the set. See Maintenance for generator voltage testing.

The main output of the generator is located in the lower left of the picture. You will see two main wires attached to the generator, a black wire (2), and a white wire (3). These are referred in other sections of this manual as L1 and L2. The other two wires (4) at the far left of the terminal block are generator winding wires, and should not need to be serviced under normal circumstances.

HEATING CONTROL OR DISTRIBUTION/CONTROL BOX

Next in your system is the heating control, or distribution/control box (See Fig. 3-7). This box is mounted on the screed, and is easily accessible to the screed operator when a heating cycle is required.

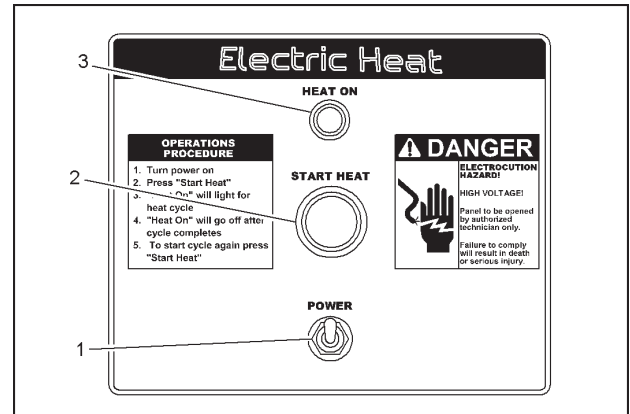


FIGURE 3-7

The control box has a power switch (1), a "Heat On" button (2), and a heat cycle indicator light (3). Under normal operation, the operator will only turn the power switch (1) to the "Power" position, and depress the "Heat On" button (2).

The bottom of the control box contains the system element breakers, and the 6 main outputs for the screed heating elements (See Fig. 3-8). Since the heating elements are powered by 220 VAC to 240VAC, each element has two breakers. There is one breaker for each leg of each element. Also shown is one of the two pin plugs that supplies power to the screed elements. There are a total of six plugs.

Section 3 OPERATION



ELEMENT CONNECTIONS

Any element lead can be plugged into any supply plug under the heating control control/distribution box. All six plugs are equally rated.

NOTE: All control boxes are manufactured the same to fit all screed and paver combinations. If your screed does not have enough element wires to fill all the plugs on the bottom of the control box, it may be normal. Any plugs that are not filled should be capped with appropriate plug terminator.

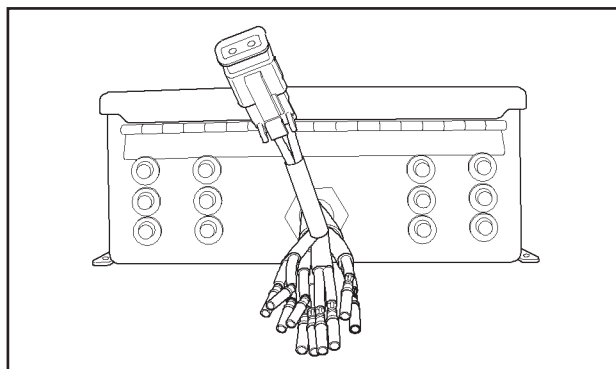


FIGURE 3-8

This picture shows the contents of the control box before the wiring is completed (See Fig. 3-9).

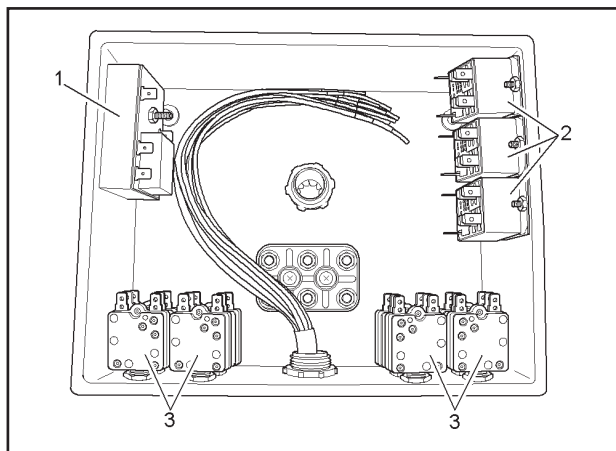


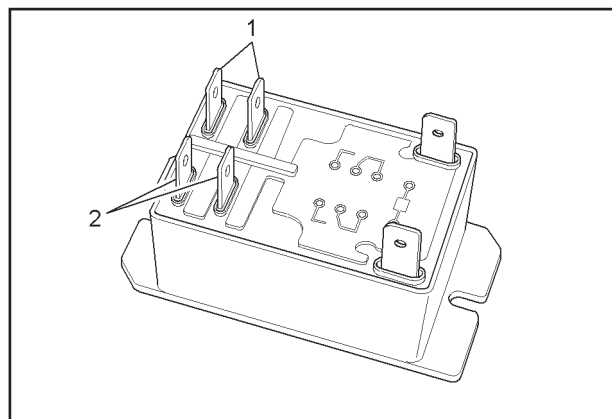
FIGURE 3-9

The control box consists of three major types of components. The system timer (1) is located in the upper left hand corner of the box. The element relays (2) are located in the upper right hand corner of the box, and the element breakers (3) are located in the lower surface of the box. The other block in the center is used as a wire junction block only. Refer to the wiring schematic at the end of

this manual, and you will note the following connections are made.

Each element output from the bottom of the box consists of two wires. One wire will connect to the L1 circuit, and the other wire will connect to the L2 circuit. The L1 circuit is the left bank of element breakers. Each breaker has two terminals. One terminal is connected to the main input, and the other terminal is connected directly to an element output wire. The L2 circuit is the right bank of element breakers. This bank is wired slightly different, in that each leg not only goes from the main L2 power lead through a breaker, but each leg then goes through one of the six contacts on the element relays. It is these relays that "make" or "break" the circuit to each element to start or stop the heating cycles.

An element relay is shown here (See Fig. 3-10). There are three relays in the control box. Each relay has two separate sets of contacts operated by one coil.



The coil contacts on the relay shown are at the top and bottom of the right hand side of the relay. One set of contacts are the two terminals (1) at the top left of the relay, and the other set of contacts (2) are at the bottom left of the relay shown.

When the coil is energized, both sets of contacts will close. All the relays used are "normally open" See Maintenance for testing element relays.

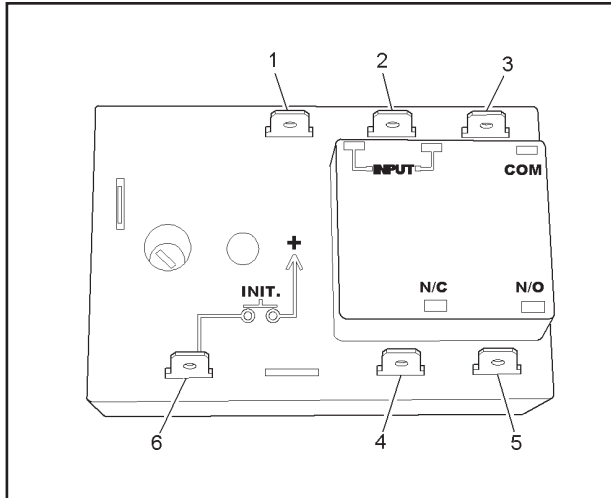


FIGURE 3-11

A heat system timer is shown (See Fig. 3-11). There are six terminals on the timer. The top two left terminals are the main 12vdc input terminals for the timer. The ground (1) is on the left and the power (2) is on the right.

The top right terminal is the common terminal (3) to the internal timer relay that controls the heat system. When power is applied to the input terminal, it is also jumped to the common (or COM) terminal on the timer. The lower right two terminals on the timer are the outputs of the internal timer relay. The left of these two is the normally closed terminal (4), which is not used in this system, and the lower right terminal (5) is the normally open terminal. The normally open terminal is used as our output terminal to "turn" the heating system on. The lower left hand terminal (6) is the "initiate" contact. When the "Heat On" button is depressed, 12vdc is momentarily applied to this terminal to start the timer cycle. During the timer cycle, power will not be applied to this terminal unless the "Heat On" button is depressed again. Keep in mind, if this happens, the timer will re-start.

Here is a picture of an element breaker (See Fig. 3-12).

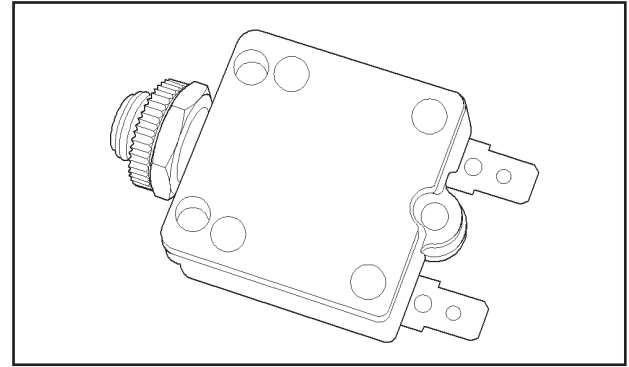


FIGURE 3-12

The breakers are wired into each leg of each element. If an element has a fault, either in the wiring, or in the element itself, the breaker will trip and power will no longer be applied to that leg of the element. The breakers can be manually re-set by depressing the trip button back in when they are extended. If by depressing the breaker re-set, the breaker will not re-set, there may be a need to replace the breaker, or diagnose the element, or element wiring, it is connected to.

Section 3

OPERATION



HEATING ELEMENT

Next in your system are the screed heating elements themselves. Each element is sized to fit properly in your screed, and provide sufficient power to heat your screed plate to a temperature that mix will not drag or stick to the lower surface of the screed plate.

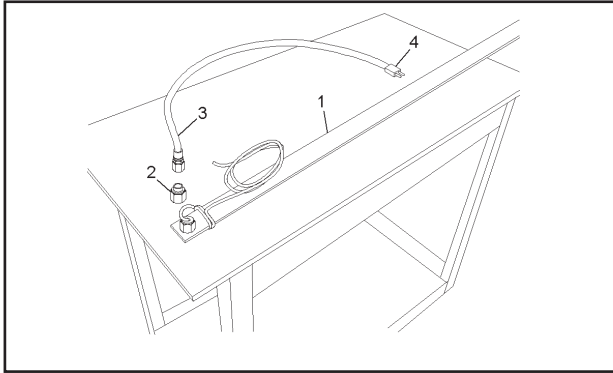


FIGURE 3-13

An element assembly consists of four main components. The element (1), the wire protector adapter (2), the wire protector (3), and the two pin wire plug (4) at the end of the element protector (See Fig. 3-13).

Each element (1) used has a thin strip of insulation (2) over it to keep the heat of the element from escaping. A support bar (3) is then laid over the element, and a shield (4) protects the element assembly (See Fig. 3-14). Each element is clamped down to the screed plate so as to provide a positive and efficient connection between the element and the screed plate. To help ensure a good transfer of heat from the element to the screed plate, a heat transfer compound is used. This compound should be applied sparingly to the lower surface of the element with a putty knife or

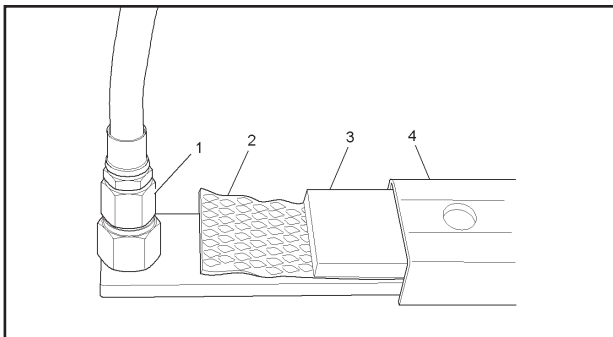


FIGURE 3-14

other similar tool before the element is installed in the screed (See Fig. 3-15). A thin layer of heat transfer compound is all that is needed. Only enough to be certain that there are no air gaps under the

elements. Usually this layer should not be more than 1/16" thick before the element is installed.

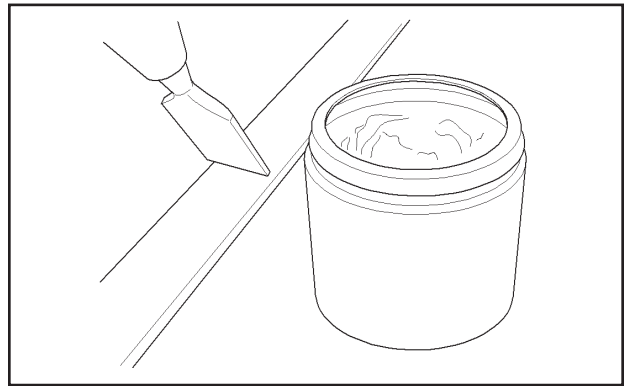


FIGURE 3-15

Apply the heat transfer compound as previously shown. Remember, a thin layer to ensure contact is all that is needed. If you use too much compound, the element will not be able to be clamped to the screed close enough, and a loss of heating potential will occur.

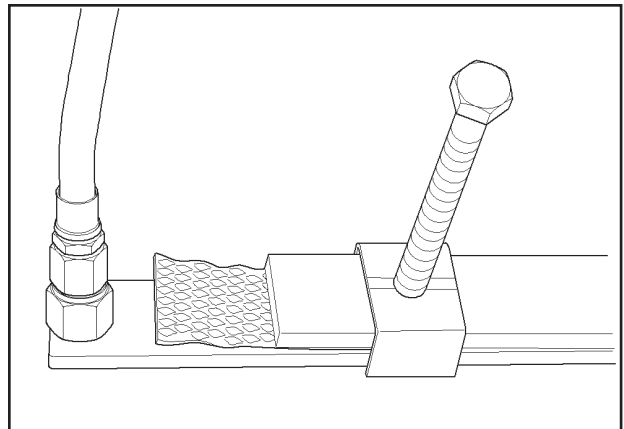


FIGURE 3-16

A typical element clamp assembly is shown (See Fig. 3-16). The clamp setup may vary slightly depending on your screed size, or whether you are working on the extension or main screed plates. The principle is the same with all of the clamps.

Enough pressure should be applied to the element assembly to sufficiently hold the element tight against the screed plate surface. All clamp setups are lockable with a jam nut on the adjustment screw. After tightening the clamping stud, lock the clamp by tightening the stud jam nut. To remove an element, loosen all the clamping studs over the element, and then the element can be removed from the frame through the access provided at the outer end of the screed. The extension elements are accessed by removing the top cover from the extension screed plate.



Section 4 MAINTENANCE

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Section 4

MAINTENANCE



GENERAL INFORMATION

This section gives the necessary procedures for routine and general maintenance on the Legend Electric Screed System.

Follow all the Maintenance Schedules and Maintenance Procedures to maintain the machine in top operating order.

ROUTINE MAINTENANCE

GENERAL INFORMATION

MAINTENANCE must be a planned program that includes periodic machine inspection and lubrication procedures.

The MAINTENANCE program must be done, based on the machine "Operating Hours", recorded on the hourmeter, or based on the "Periodic Schedule", which is done at time intervals of weekly, monthly, or yearly.

MACHINE LUBRICATION

Proper lubrication is necessary to maintain the machine at top efficiency. Refer to the lubrication information in Table 4-1 Lubrication Chart. All lubrication points are shown in Figure 4-1.

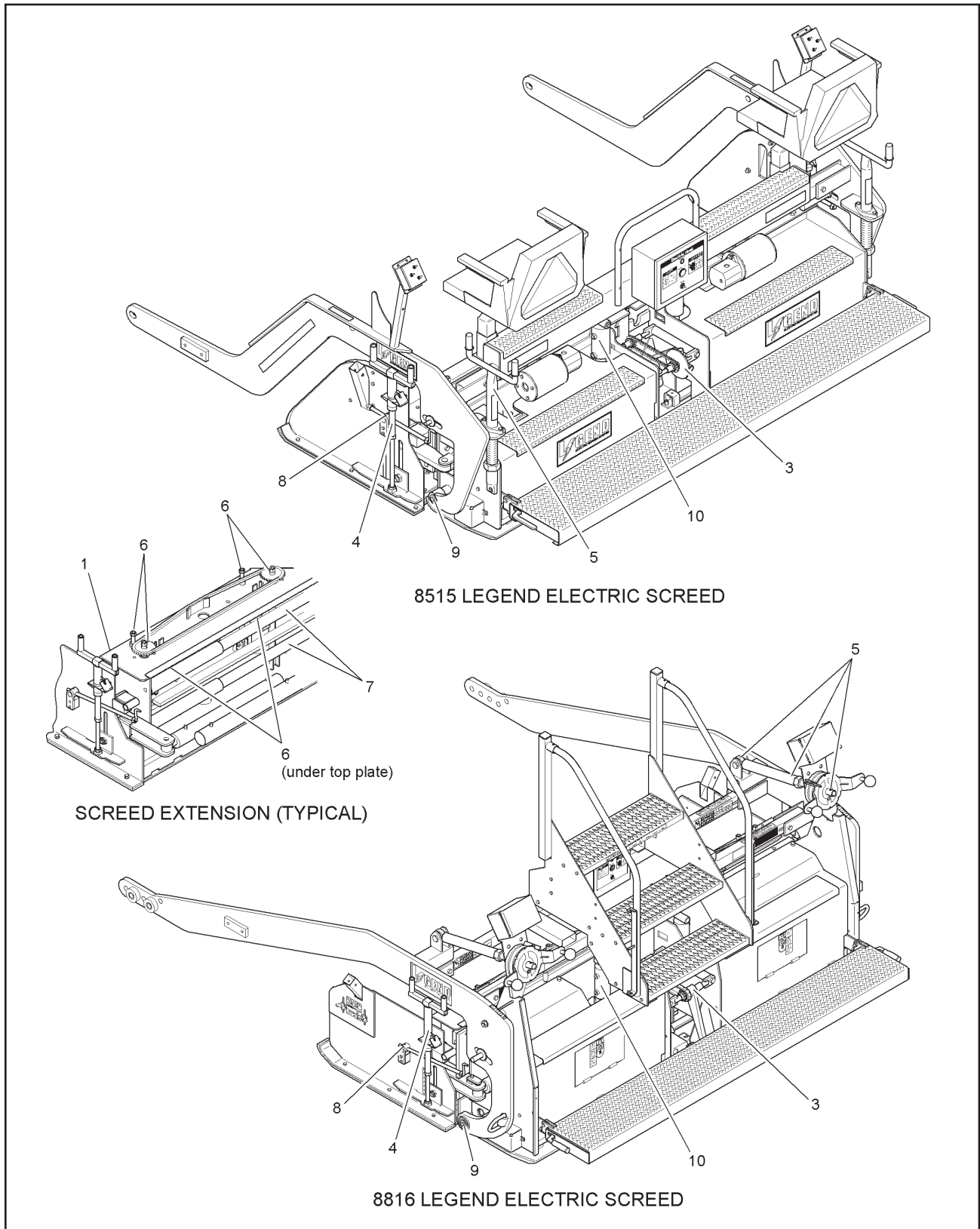


FIGURE 4-1. LUBRICATION POINTS

Section 4

MAINTENANCE



TABLE 4-1. LUBRICATION CHART

ITEM NO.	TYPE LUB	DESCRIPTION AND LOCATION	INTERVAL
1	B	SCREED EXTENSIONS, left and right (clean surface)	Daily
2	B	SPRAY ANY PART OF MACHINE THAT CONTACTS ASPHALT	Daily
3	A	SCREED CROWN, on chain and turnbuckles	Weekly
4	A	DEPTH SCREW (grease first in lock position, unlock and turn 180° and grease)	Weekly
5	A	MAIN FLIGHT SCREWS BALL SOCKET & NUT	Weekly
6	A	ALL SCREWS ON EXTENSION AND BEARING	Weekly
7	A	TUBES AT CHROME ROD EXTENSIONS	Weekly
8	A	TILT SCREWS	Weekly
9	A	SCREED PIVOT	Weekly
10	A	SLOPE CYLINDER PIVOT	Weekly

LEGEND

- A GREASE WITH SHELL AVANIA EP GREASE 2 OR EQUIVALENT
- B SPRAY WITH AN APPROVED RELEASE AGENT

MAINTENANCE SCHEDULE

General Information

The Maintenance Schedule lists the recommended time intervals between machine maintenance inspections and lubrication procedures. Table 4-1 gives inspection and lubrication information for the Model 8816 Conveyor Paver.

The "Hour" and "Periodic" time periods list most service intervals. The maintenance schedule begins with ten hours, or daily, maintenance intervals and continues through the 1,000 hours, or annual, maintenance schedule intervals.

NOTE: If the machine is operated more than ten hours per day, follow the "Hour" schedule. If the machine is operated less than ten hours per day, follow the "Periodic" schedules, where they apply.

Preventive maintenance on the 8816 Conveyor Paver will provide years of trouble-free operation. Adjustment can be performed in the field with ordinary hand tools. Engine preventative maintenance, other than oil, air, and fuel filter changes is not covered in this section. Refer to engine operator's manual for engine service information.

NOTE: For your convenience there is an oil drain hose located inside of right hand side cover on machine. Remove small access cover and stick hose thru hole in side. (Later Models).

IMPORTANT NOTICE!

The changing of oil and cleaning of the paver should only be done in a designated area that can contain the oil and chemicals involved in any maintenance requirement. These by-products should be discarded in accordance with environmental regulations.

CAUTION: Do not substitute fasteners of any kind unless the fasteners are equal in size and grade as original equipment.



NOTE: When performing any routine maintenance such as 50, 100, 250, 500, and 1000 hours, always include previous routine maintenance hours to the higher hourly schedule.

10 Hour or Daily Routine Maintenance

1. Cleaning the paver at the end of the working day while the machine is still hot is very important. A paver that is continuously left with mix stuffed in every corner is going to increase maintenance costs. Scrape off mix and spray cleaning solvent or release agent on the screed plate, hopper, etc., any place that has come in contact with the mix. Spray down the conveyors while they are running. All cleaning should be performed while the machine is hot.

NOTE: For cold weather, keep conveyor flight chains properly oiled with cleaning solvent or release agent. This will prevent conveyor bars from sticking. Neglect could result in conveyor bar damage/or drive chain failure.

CAUTION: If mix is allowed to remain in the machine overnight, possible damage can result on start-up the next day. Poor housekeeping will increase maintenance costs.



2. Keep the fuel tank full to keep condensation from forming. Fill at end of day.
3. Perform engine preventative maintenance as described in your engine operator's manual. Any engine preventative maintenance should always begin with an oil check.

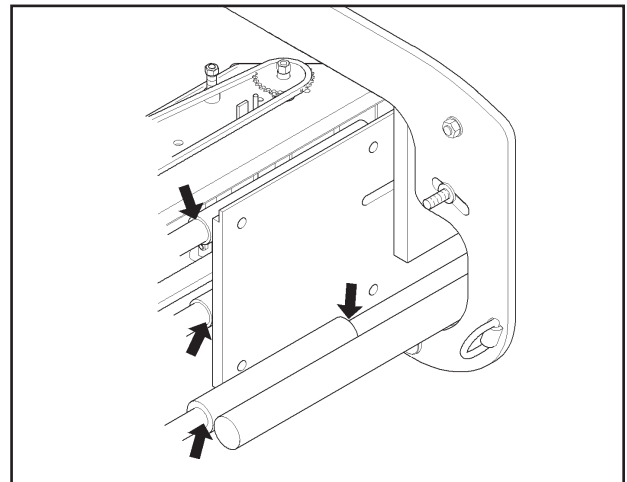


FIGURE 4-2. EXTENSION SLIDE LUBRICATION

Section 4

MAINTENANCE



After The First 50 Hour and Weekly Routine Maintenance

1. For both sides of the screed, lubricate all grease fittings on the flight screw, the fitting on the depth screw, and the fittings on the flange bearings located on top of the extension screed (see Figure 4-3). Grease nuts on extension screws.

SCREED EXTENSION TOP GUIDE ADJUSTMENT

1. Close the left and right extensions to their fully retracted positions.
2. Locate the five $\frac{1}{2}$ " bolts that hold the upper slide guide rails on the rear of the screed frames for each side.
3. Loosen the five $\frac{1}{2}$ " bolts that hold the upper slide guide rails.
4. Using a blunt punch and a hammer, carefully tap the upper slide guide rail down. Access the upper slide guide rails through the small openings in the upper cover near the front of the main screed frame. Start at the outside of the machine, and work your way in to the center. Tighten each of the five $\frac{1}{2}$ " bolts, one at a time, as you work your way to the center.
5. When the upper slide guide rail is tight, finish tightening the five bolts per side to 75 ft. lbs. (100 N.m.).
6. Run the extensions out fully and grease the slide track rails.

NOTE: The slide tracks should be greased daily to help prevent excessive wear.

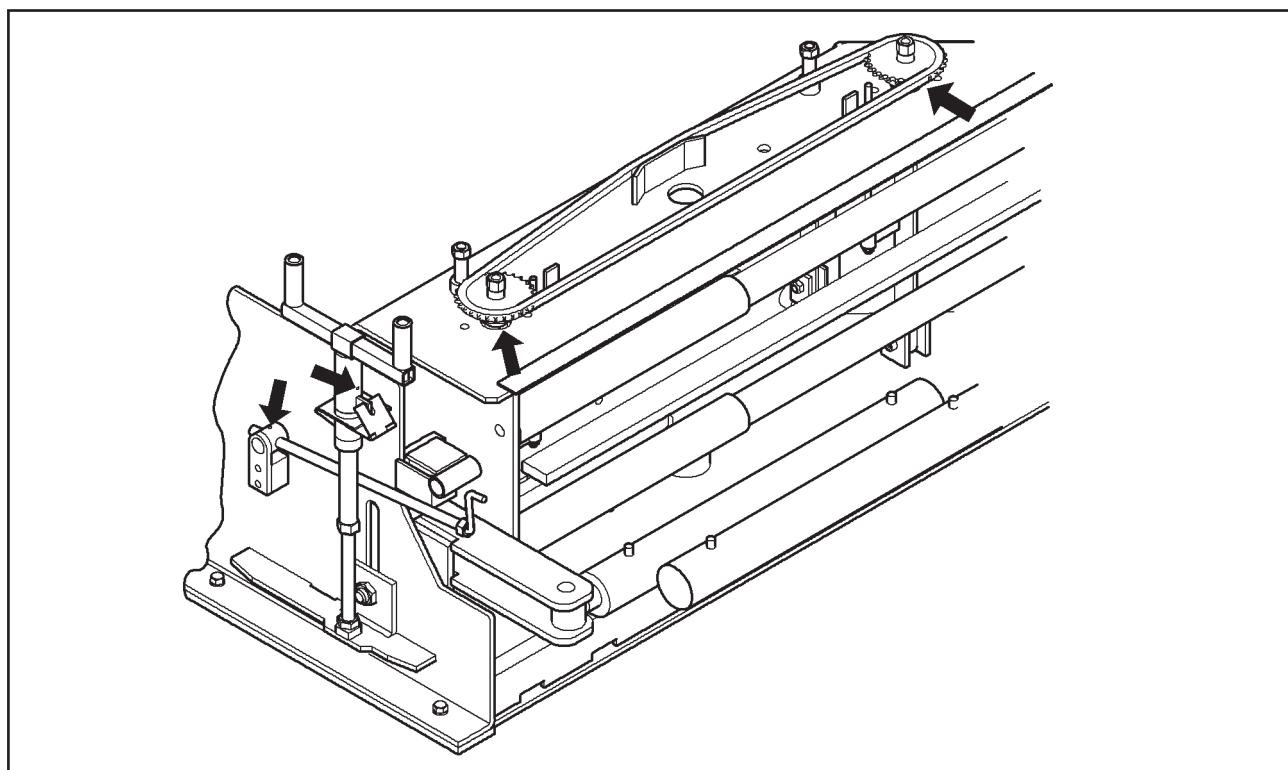


FIGURE 4-3. SCREED ASSOCIATED LUBRICATION POINT LOCATIONS

REPLACING SCREED EXTENSION WEAR-PLATES

Removal

1. Run extension out fully.
2. Remove endgate by disconnecting tilt screw and loosen the 7/8" jam nut.
3. Remove nut. Endgate will drop forward out of slot and slide off of stud.
4. Remove bolts out of lower adjustment screws on top of wearplate.
5. Locate and unplug the element power wire. Make certain the wire running into the extension screed is loose and will drop away when the screed plate is removed with interference. Closely inspect the plugs, pins, and wires for damage. Replace if needed.
6. Lower screed to ground and pull front pivot pin out.
7. Lift screed and wearplate should be disconnected.

Installation

1. Clean all areas where new wearplate will be attached.
2. Place new wearplate in position with floor jack or by lowering screed to floor and slide pivot pin in.
3. Reconnect the element power wire and retie the power cable to the attachment point provided.

NOTE: Do not tie the power cable so that it is tight. A small amount of slack in the cable where it enters the protective hose fitting is required.

4. Attach adjustment screws to new wearplate.
5. Place endgate back on.
6. Adjust 7/8" nut so that endgate will move up and down freely, then lock in place with jam nut.
7. Connect tilt screw.

REPLACING SCREED MAIN WEARPLATES

Removal

1. Remove walkboards.
2. Remove screed lids.

NOTE: Once walkboards are removed lids will slide out.

3. Remove or torch the 20 bolts holding wearplate to screed frame.
4. Under the heating control/distribution box, locate the element attachment plugs. Remove the protective cover, and unplug the main screed elements so that the main element power wires can be lowered with the wear plate.
5. Before raising screed off of wearplate, clamp center of crown gussets so that screed frame stays flat.
6. Raise screed off of wearplate.

Installation

1. Clean screed frame.
2. Set screed frame down on to new wearplate letting cylinders carry most of weight. This will let plate be moved for alignment of bolts.
3. Place 5 bolts in front left side first.
4. Rotate crown in and out so that five bolts in right side line up.

NOTE: May need to clamp or pry around to line up.

5. Once these bolts are in place, bolt rear of plate up to frame assembly.
6. Once bolts are started, lift screed and set on three 2" x 4" boards to hold flat. Place one board at each end and one in the center.
7. Let screed all the way down and torque bolts from center out, 2 on left side then 2 on right side until all bolts are torque to 50 ft. lbs. (67 N.m).
8. Install screed lids and walkboards.
9. Reconnect all element wires that were unplugged. Closely inspect all plugs, pins, and wires for damage. Replace if needed.

Section 4

MAINTENANCE



GENERATOR SPEED TUNING

The LeeBoy screed heating generator is hydraulically driven. When the paver is at full rpm, and the hydraulic system is at normal operating temperature, the generator should operate at a sufficient speed to produce between 220VAC and 240VAC. This voltage can be measured inside the control box between the two main input wires L1 and L2. If you measure from L1 to the frame of the machine, or ground, the voltage will be half of the rated output of the generator. A volt meter that can read frequency can be used to test the speed of the generator. The generator, when the paver engine is at full RPM, should operate at a speed of approximately 3480 to 3660 RPM, or 58 HZ to 61 HZ. As the generator speed drops below 3480, the voltage, and performance of the heating system will also drop.

The generator should never be allowed to operate at a speed of 3800 or greater. Generator damage will occur, and may void your existing warranty. If your speed is above 3800 rpm, stop the set immediately.

When using a volt meter set to frequency, the speed can be read in Hz.

60Hz is exactly 3600rpm. For every single Hz above 60 an increase of 60rpm can be added to 3600. The same is true for every Hz drop below 60 Hz.

Example: 60Hz is 3600rpm. A reading of 62Hz would be 3720rpm. A reading of 58Hz would be 3480rpm.

The integrated flow control manifold will maintain the generator at it's proper speed if the correct amount of oil is supplied to the set. If the temperature of the hydraulic system rises above 160°F, some slippage may occur through the gear set of the generator motor, and the generator may slow slightly.

The integrated speed control manifold is pre-set, but there is a fine tune adjustment provided on the top of the manifold. The manifold should not be out of adjustment any more than 1/8 turn of this adjustment.

Clockwise adjustment will slow the generator down.

Counter Clockwise adjustment will speed the generator up.

Over adjustment will cause damage to the generator and void the warranty.

If your generator will not operate at the correct speed it may be necessary to test the hydraulic flow from the pump, or check the generator motor for excessive case drain flow. The case drain of the motor should not leak more than approximately 1 gallon per minute. Replace the generator motor or paver pump if they are found to be operating incorrectly. A photo tachometer may also be used to check the speed of the generator at the motor coupling by removing the motor coupling shield. Always replace shields when finished testing.

GENERATOR VOLTAGE TESTING

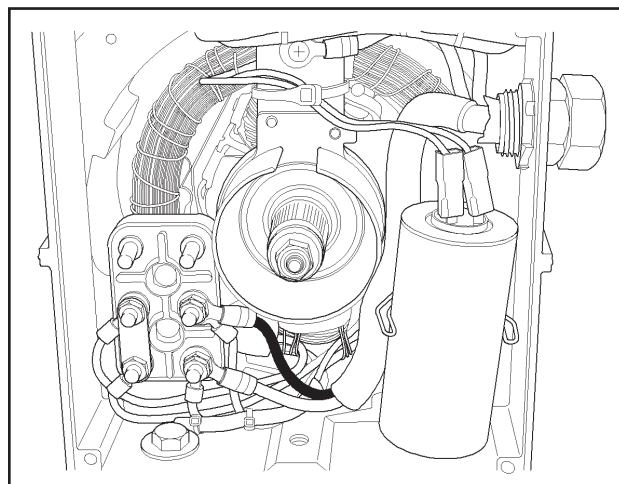


FIGURE 4-4

The generator output can be tested at the generator, or in the control box. At the generator, the voltage should be tested by placing the voltage meter test leads on the large black and white wires on the output terminal block. Depending on the speed of the generator, the output voltage should be between 220VAC and 240VAC. If your voltage at this point is lower, make certain the generator is turning the correct speed by testing with a Hz meter or photo tachometer as described in the Generator Speed tuning section of this manual. In the control box, the voltage can be tested with a volt meter between the same two large black and white wires located on a terminal block that is similar to the terminal block shown in the photo above. The voltage here should be the same.

The voltage of the generator depends on speed. As described before, the voltage will raise as speed raises, and will drop as speed drops. The voltage will drop significantly when the generator speed is allowed to drop below 3000 rpm. The capacitor located in the rear of the generator is the component that controls and regulates the voltage in the generator while it is in operation. If this capacitor fails, the voltage will drop to little or no output at all. Replacing this capacitor with a capacitor of the same type and value will help determine if the capacitor is at fault.

There are no other voltage adjustments that can be made to the generator.

TESTING ELEMENT RELAYS

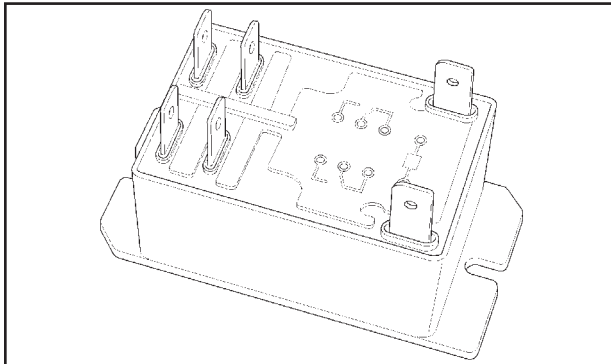


FIGURE 4-5

The element relays are 12vdc controlled, and have dual contacts rated for 240VAC. To test a relay, disconnect any wires to the relay, or completely remove it from the control box (See Fig. 4-5).

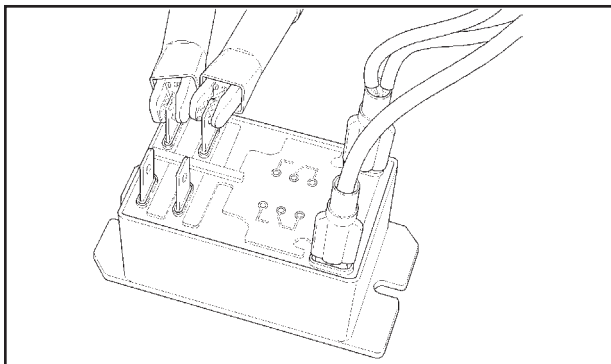


FIGURE 4-6 TEST FIRST TERMINAL SET

Place the leads of an ohm meter, or continuity tester across the contact terminals (2 to 4) or (6 to 8) as shown in Figure 4-6. Without 12vdc applied to the coil of the relay, the contact terminals should have no continuity through them. The contacts

should be "open". If the contacts are closed, and you do not have 12vdc applied to the coil of the relay, your contacts are not correct, and the relay should be replaced. Next, with the meter still on the contact terminals, apply 12vdc to the coil terminals of the relay (See Fig. 4-7). You will need to supply 12vdc positive and a ground. The terminals are not polarity sensitive. The contact terminals should now close and show a path through them for the power to be applied to the electrical elements. If your relay does not work as described above, it may be faulty, and should be replaced.

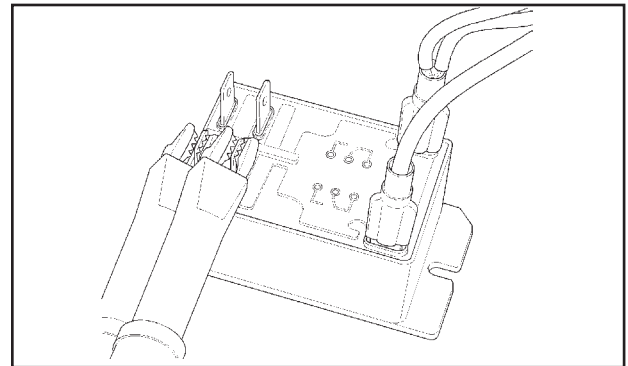


FIGURE 4-7 TEST SECOND TERMINAL SET

ELEMENT RESISTANCE TESTING

When a breaker in the control box has tripped, it must be assumed that there may be a problem with wiring or an actual element in the circuit. Elements can be tested very easily by disconnecting them one at a time from the connection point on the lower side of the control box. Once an element is disconnected, use an ohm meter and test the resistance through the element between the two pins in the plug at the end of the element cable. You do not have to test the plug attached to the lower side of the control box.

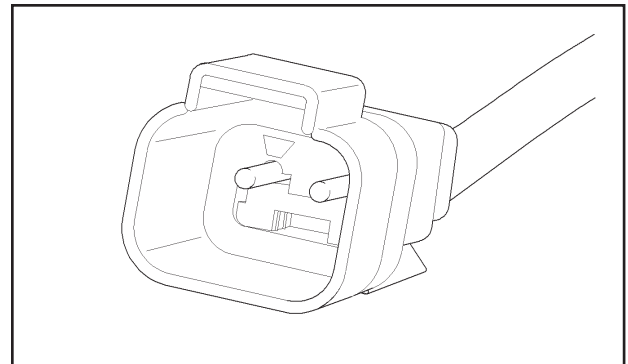


FIGURE 4-8

Test between the two pins shown here with an ohm meter. Plug at end of element wires.

Section 4 MAINTENANCE



Elements used to heat the screeds are sized depending on how much area and material they are required to heat. The actual resistance of the element will vary depending on what wattage the element is in the specific application. To know that your element is correct, you should read a resistance between 28 ohms and 60 ohms. If your element is bad, the reading will be very different from this range. The element that is bad will most likely read "open" or it will read very little resistance (less than 1 ohm) and will indicate a short through the element. Next, before you plug the element back in, check each wire (pin) with one of your test leads, and place the other lead on a bare steel section of the screed frame. At this point if you have any continuity through the element to the frame, your element is bad and must either be left disconnected, or replaced. Do not attempt to operate an element with a known short.

TESTING THE CONTROL TIMER

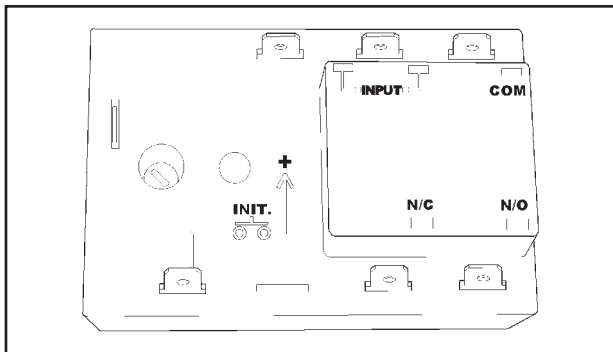


FIGURE 4-9

The control timer that operates the heating cycle can be tested for operation. To test the control timer it may be easier to remove the timer from the control box and place it on a table as shown in Figure 4-9.

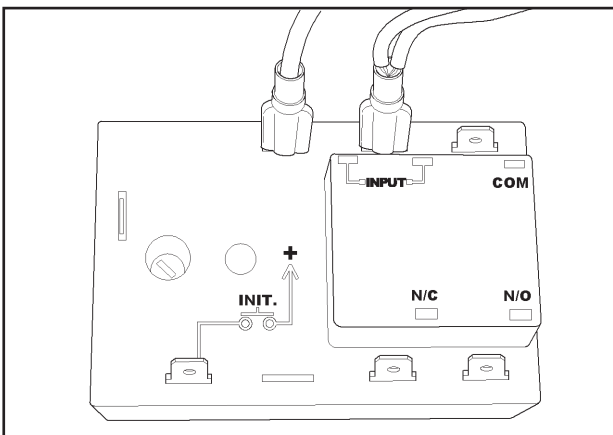


FIGURE 4-10

Using a 12vdc battery, apply power and ground to the two terminals labeled "input" (See Fig. 4-10). Pay close attention to the polarity to the terminals, as there is a ground terminal and a power terminal. If you connect a battery or power to the timer in reverse, damage will occur to the timer, and the warranty will be void. Next connect the test leads of an ohm meter, or continuity tester to the two terminals labeled "COM" and "N/O" (See Fig. 4-11). These two terminals are the contacts used in the timer relay to control the output to the rest of the circuit. The meter at this point should read that there is no connection, or infinity through the two terminals. Leaving your meter connected to the two terminals, take a jumper wire and momentarily connect the input positive terminal to the lower left "Int." terminal. When power is applied to this terminal the timing device initiates, and the relay contacts will close for the time period that the timer is set for.

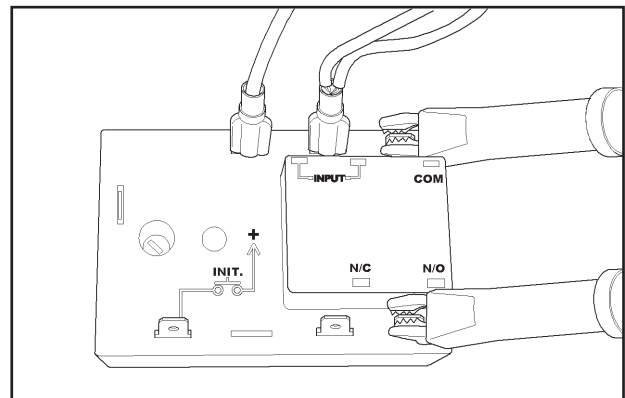


FIGURE 4-11

The timer has a small opening in the left side of the face shown in the picture above. This timer can be set by turning the screw inside the timer clockwise or counter clockwise until the slot is aligned with the mid throw of the screw. The timer can be set between .6 and 60 minutes, slowly rotate the screw one way until you feel the stop, then after noting the position of the screw, rotate the screw the other direction until the screw stops.

Set the screw in the mid position of this throw. Be careful not to turn the screw too hard, as you may damage the adjustment if you force the screw past it's natural stops (See Fig. 4-12).

The time should be set to the mid position, about 30 minutes. It is not necessary to set the timer for a longer period, as it can easily be re-set during operation by depressing the "Start Heat" button at any time. Setting the timer for longer durations can increase the chances of overheating and damaging your screed. The contacts between "COM" and "N/O" should remain closed as long as the timer is set for, and open when the timing cycle is finished. You can adjust down the time during this test to make the test go faster. If your timer does not operate as described, replace the timer.

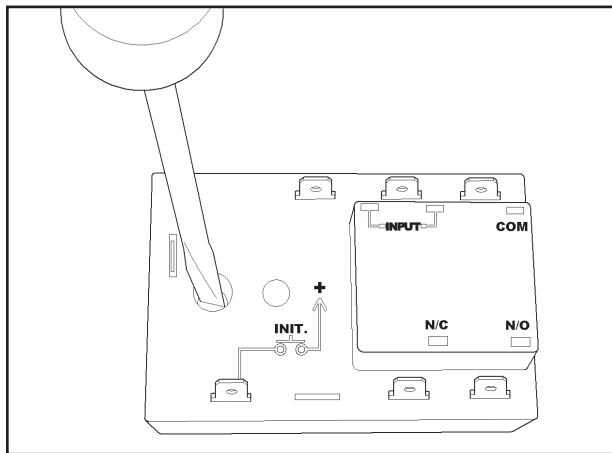


FIGURE 4-12

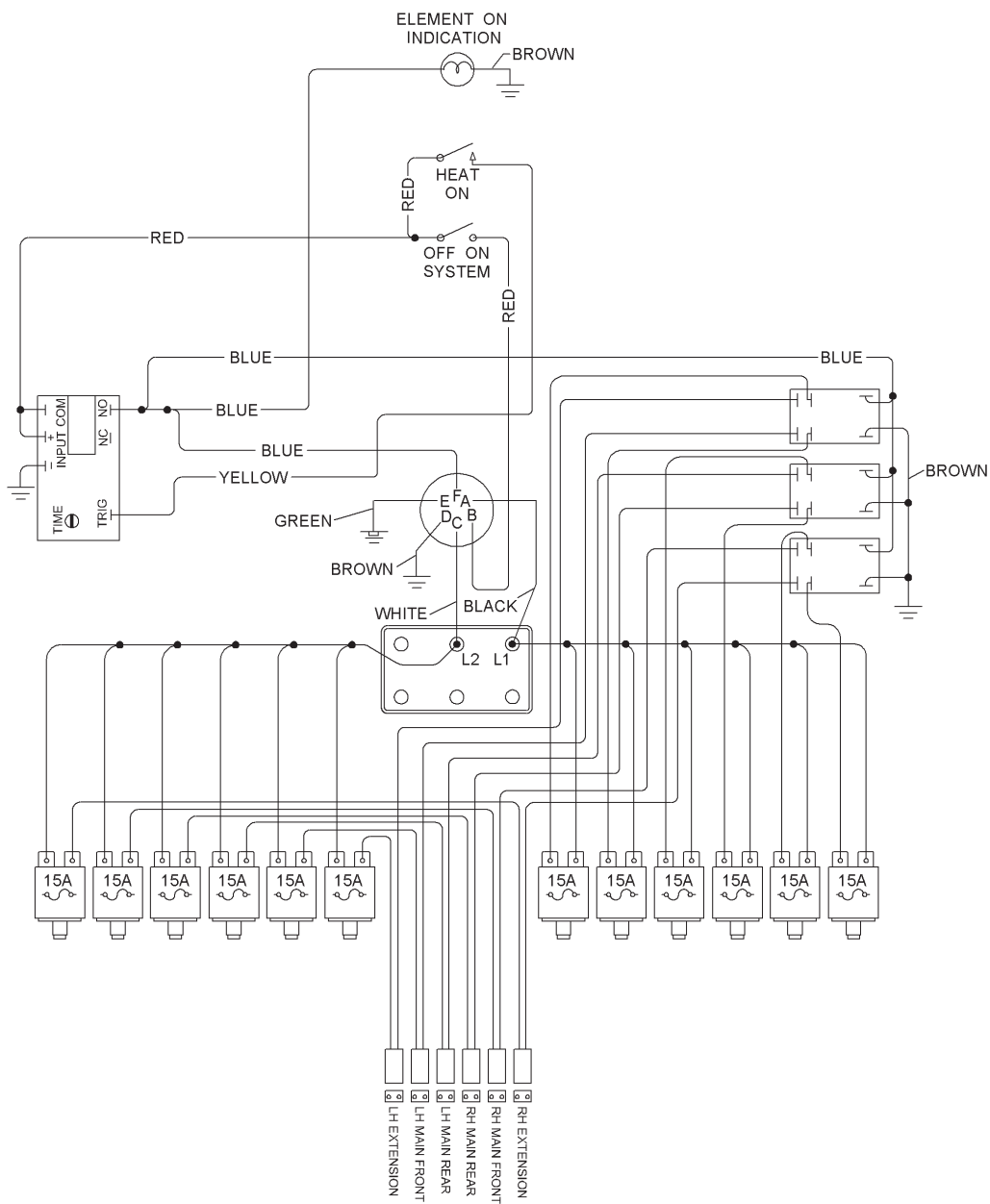


FIGURE 4-13 CONTROL SCHEMATIC

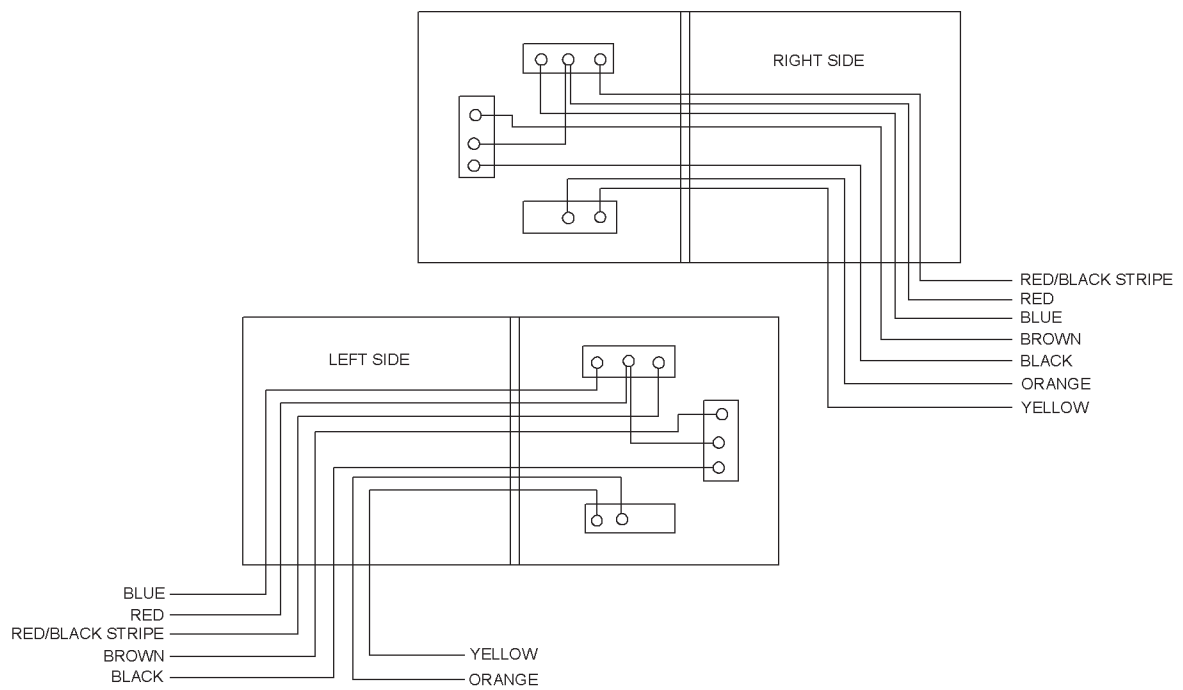


FIGURE 4-14 REMOTE SCREED BOX ELECTRICAL SCHEMATIC

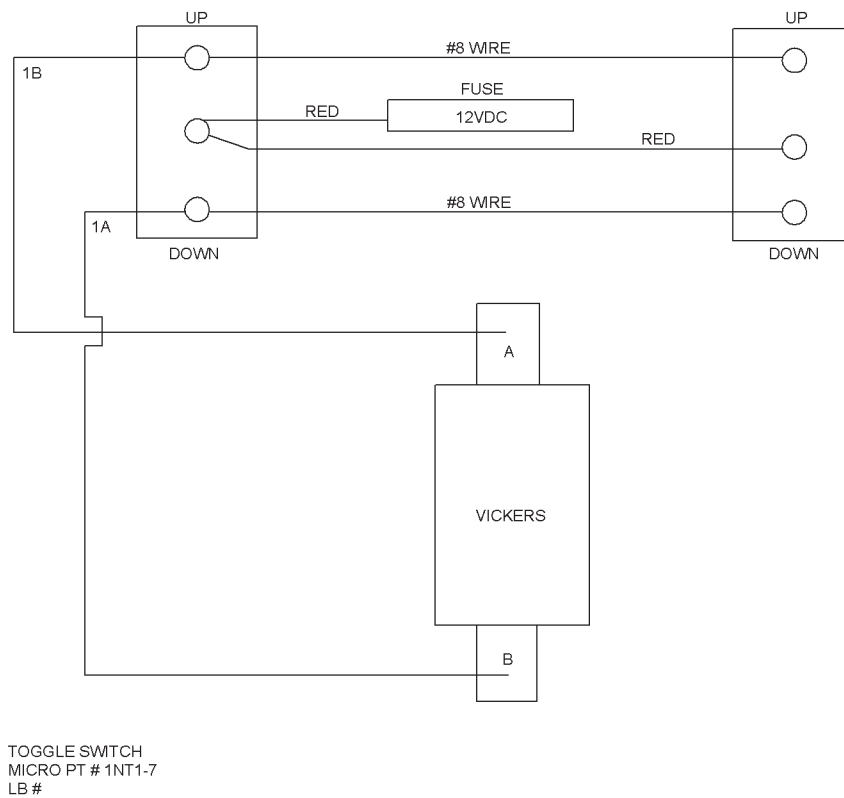


FIGURE 4-15 SCREED LIFT ELECTRICAL SCHEMATIC

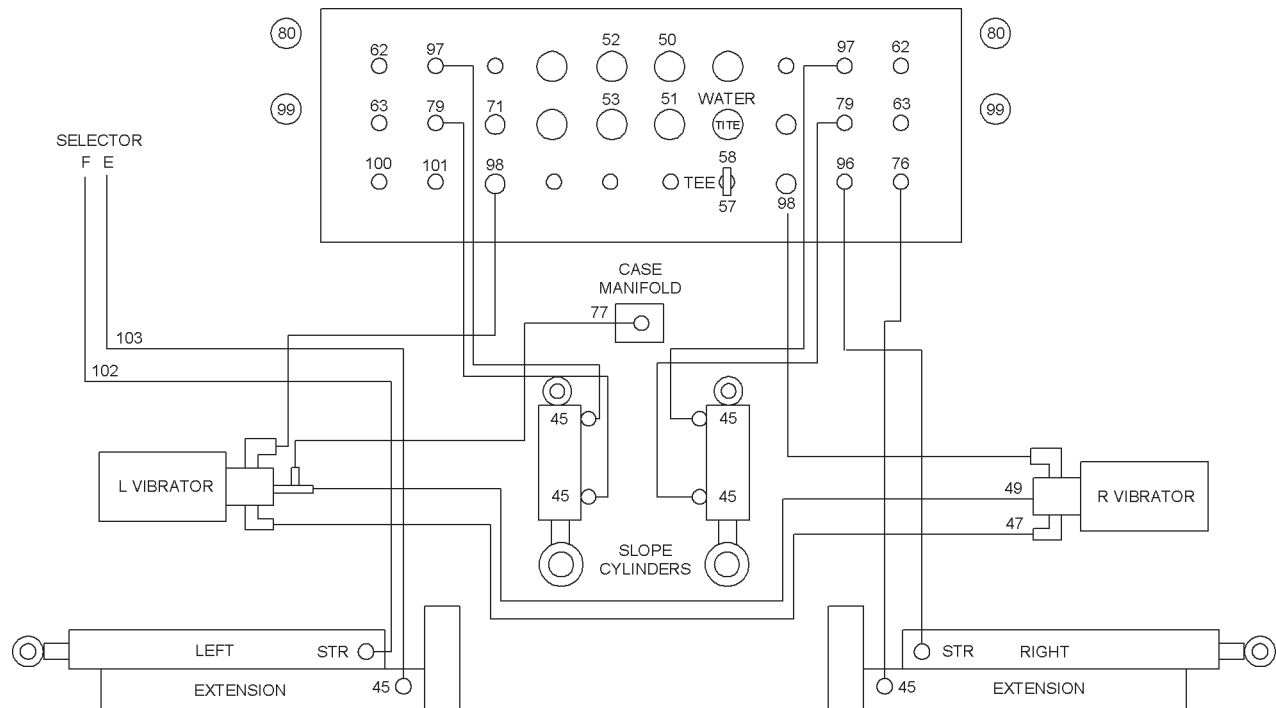


FIGURE 4-16 OUTSIDE BULKHEAD TO SCREED HYDRAULIC SCHEMATIC

Section 4 MAINTENANCE



GENERAL

The troubleshooting chart below identifies the most common symptoms of failure. Use this chart to help identify the failed component.

TROUBLESHOOTING CHART

SYMPTOM	CAUSE	REMEDY
Screed heating system will not operate at all.	Control box power switch not in "on" position. Breakers are in a tripped condition. Engine not operating at proper throttle. Generator malfunction.	Ensure that the screed control box power switch is "on". Ensure all element breakers are in their "set" position with no breakers showing a tripped condition. Ensure the paver is running. Set the throttle on the paver to full engine RPM. NOTE: Throttle positions less than full will still produce screed heat, but at a drastically reduced rate and temperature. See generator voltage testing.
Screed heats, but one screed section does not.	Screed section not plugged into bottom of control box out puts. Element breakers for screed section in a tripped condition. Faulty element relay.	Ensure the screed not heating is plugged into the bottom of the control box out puts. Ensure the element breakers for that screed section are not tripped. See Testing element relays, or Testing element resistance.
When starting the heat system, it will not stay running long, or at all.	Heat system timed out.	See Testing system timer.
Screed is heating, but never gets hot enough to pave.	Engine not operating at proper throttle. Elements improperly clamped. Generator malfunction.	Ensure the paver is running. Set the throttle on the paver to full engine RPM. NOTE: Throttle positions less than full will still produce screed heat, but at a drastically reduced rate and temperature. Go over proper element installation procedures, and ensure elements are clamped properly. See Generator speed tuning. See Generator voltage testing.
Heating system seems to be working, but the light isn't on.	"Heat On" light is burned out.	Replace the "Heat On" light.
Elements have been tested but the breaker(s) still trip(s).	Faulty element wiring. Faulty breaker(s).	Test or inspect element wiring. Replace defective breaker(s).



ILLUSTRATED PARTS LIST

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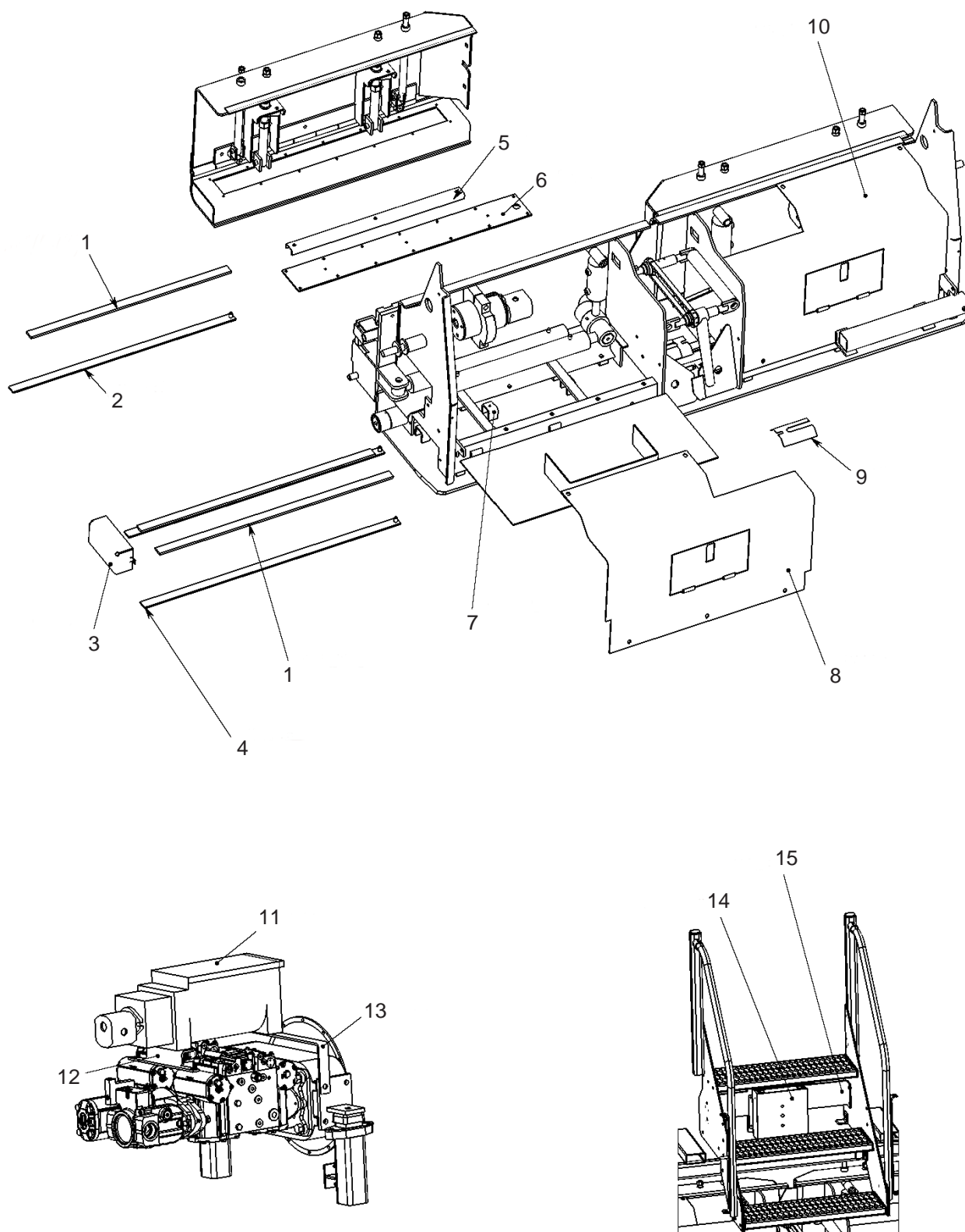


FIGURE 1. ELECTRIC SCREED 8816

ILLUSTRATED PARTS LIST

FIGURE 1. ELECTRIC SCREED 8816

FIG ITEM	PART NUMBER.	NOMENCLATURE 123456	UNITS PER ASSY
1	985121	BAR,.375X1.5X42	2
2	985119	ELEMENT, HEATER, SCREED,40"	2
3	985125	COVER, ELEMENTS, SCREED BASE	1
4	985118	ELEMENT, HEATER, SCREED,46"	2
5	985123	CLAMP, ELEMENT, SCREED EXT	2
6	985133	PLATE, HEAT BOX COVER	2
7	985122	CLAMP, ELEMENT, SCREED BASE	A/R
8	985552	ASSY, SCREED COVER, LH	1
9	985555	COVER, ELEMENT CENTER	1
10	985551	ASSY, SCREED COVER,RH	1
11	985155	GENERATOR, HYD	1
12	985153	MOUNT, GENERATOR	1
13	985154	BRACE, GENERATOR MOUNT	1
14	985138	ASSY, ELECTRIC HEAT CONTROL	1
15	985548	BRKT, CONTROL BOX, ELECTRIC HEAT	1

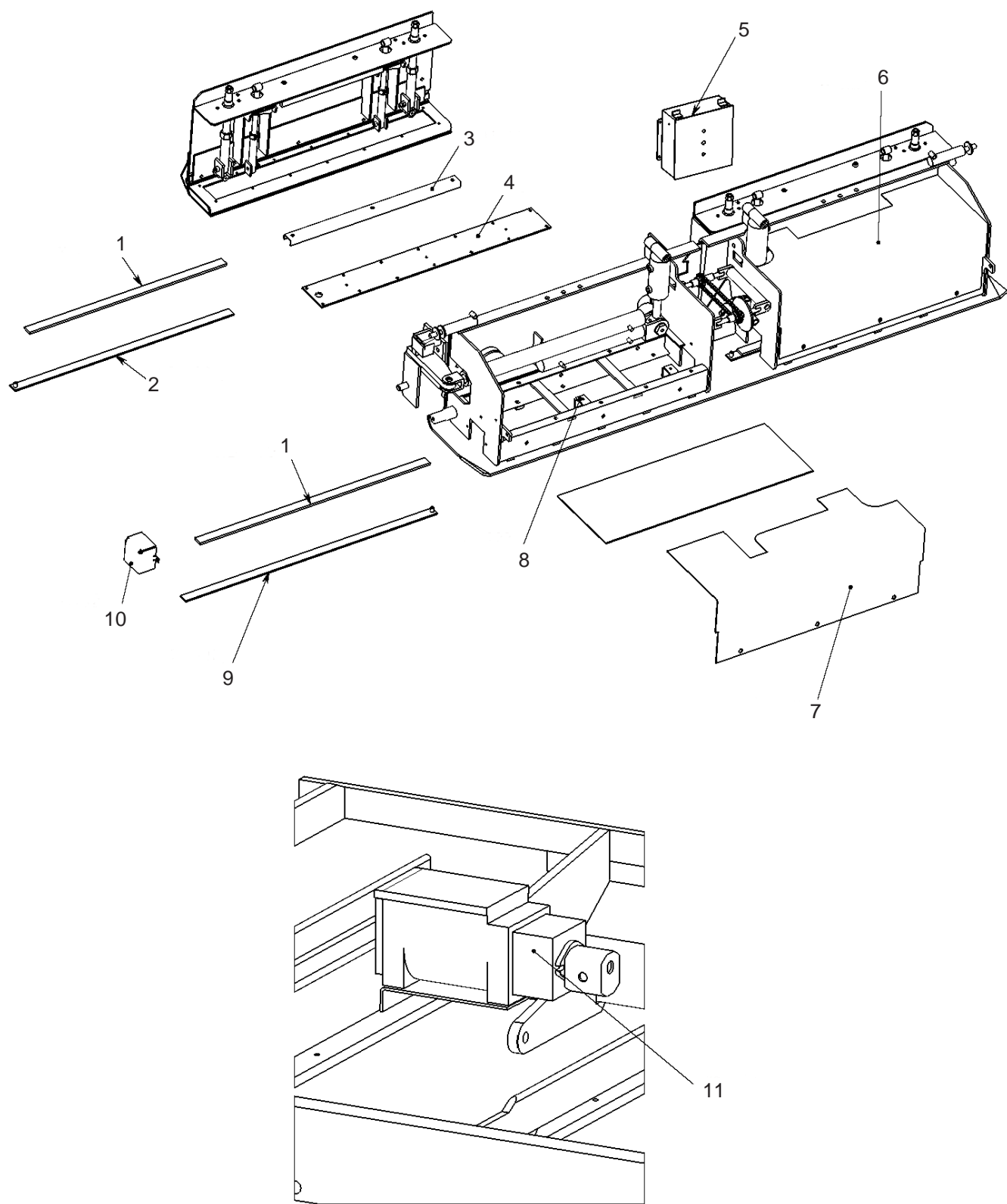


FIGURE 2. ELECTRIC SCREED 8500-8515

ILLUSTRATED PARTS LIST

FIGURE 2. ELECTRIC SCREED 8500-8515

FIG ITEM	PART NUMBER.	NOMENCLATURE 123456	UNITS PER ASSY
1	985121	BAR, .375X1.5X42	
2	985119	ELEMENT, HEATER, SCREED,40"	
3	985123	CLAMP, ELEMENT, SCREED EXT	
4	985133	PLATE, HEAT BOX COVER	
5	985138	ASSY, ELECTRIC HEAT CONTROL	
6	985147	PLATE, SCREED COVER,RH	
7	985148	PLATE, SCREED COVER,LH	
8	985122	CLAMP, ELEMENT, SCREED BASE	
9	985118	ELEMENT, HEATER, SCREED, 46"	
10	985124	COVER, ELEMENTS, SCREED BASE	
11	985135	GENERATOR, HYD	